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**CENTURY OF THE SEAS: UNLOCKING INDIAN  
MARITIME STRATEGY IN THE 21st CENTURY**

by

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September 2017

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THE 21st CENTURY**

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requirements for the degree of

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## **ABSTRACT**

India's maritime security strategy document, *Ensuring Secure Seas*, was released in 2015 and sets the Indian Ocean as a priority for India's foreign policy with the goal of maritime dominance. What are the driving factors that influence this new maritime strategy that elevates the Indian Navy beyond its traditional "Cinderella service" role? This thesis attempts to answer this question. In order to accomplish this objective, this thesis looks at the significance of the Indian Ocean for the major state and non-state players that have considerable stakes in the region, as well as their maritime capabilities relative to India. Next, the thesis examines India's modernization efforts of its fleet and naval doctrine to carry out the roles defined in *Ensuring Secure Seas*. Finally, this thesis examines India's economic policies, specifically maritime trade, as well as domestic politics, to see how they engage and shape Indian maritime strategy. These findings present a combined analysis of economic, security, and political factors mentioned above, centered on a primary focus of security and stability within the Indian Ocean region, to foster continued prosperity of India's overseas trade networks. The driving factors that shape *Ensuring Secure Seas* are heavily influenced by India's overseas trade and the need to protect that trade against various threats. This study should benefit strategists and policy-makers alike with regard to the South Asia region.

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

|       |                                    |
|-------|------------------------------------|
| A2/AD | anti-access/area-denial            |
| AAW   | anti-air warfare                   |
| AEW&C | airborne early warning and control |
| AIP   | air-independent propulsion         |
| AOR   | area of responsibility             |
| ASuW  | anti-surface warfare               |
| ASW   | anti-submarine warfare             |
| BJP   | Bharatiya Janata Party             |
| BMD   | ballistic missile defense          |
| bpd   | barrels per day                    |
| CBG   | carrier battlegroup                |
| CG    | guided missile cruiser             |
| CIWS  | close in weapon system             |
| CPEC  | China–Pakistan Economic Corridor   |
| CSG   | carrier strike group               |
| CTF   | carrier task force                 |
| DDG   | guided missile destroyer           |
| DOD   | Department of Defense              |
| EEZ   | exclusive economic zones           |
| FTP   | Foreign Trade Policy               |
| GDP   | gross domestic product             |

|         |  |
|---------|--|
| HAL     | Hindustan Aeronautics Ltd                              |
| ICBM    | intercontinental ballistic missile                     |
| IOR     | Indian Ocean region                                    |
| ISAR    | inverse synthetic aperture radar                       |
| JWGACTC | Joint Working Group on Aircraft Technology Cooperation |
| MaRV    | maneuverable reentry vehicle                           |
| MOU     | memorandum of understanding                            |
| MPA     | Maritime Patrol Aircraft                               |
| MSR     | Maritime Silk Road                                     |
| MT      | million tons   |
| OBOR    | One-Belt, One-Road                                     |
| PLA     | People's Liberation Army                               |
| PLAN    | People's Liberation Army Navy                          |
| PRC     | People's Republic of China                             |
| SAG     | surface action group                                   |
| SAM     | surface-to-air missile                                 |
| SLBM    | submarine-launched ballistic missile                   |
| SLOC    | sea lines of communication                             |
| SSBN    | nuclear ballistic missile submarine                    |
| SSGN    | nuclear guided-missile submarine                       |
| SSM     | surface-to-surface missile                             |
| SSN     | nuclear fast-attack submarine                          |
| STOBAR  | short take-off but arrested recovery                   |

|         |                               |
|---------|-------------------------------|
| UPA     | United Progressive Alliance   |
| URG     | underway replenishment group  |
| USN     | United States Navy            |
| USPACOM | United States Pacific Command |
| VLS     | vertical launching system     |

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## I. INTRODUCTION

India's new stealth destroyer, the INS Visakhapatnam, is expected to be commissioned by 2018. In keeping with India's intention of naval modernization through increasing use of indigenous resources, the vessel is composed of seventy percent Indian material and technology.<sup>1</sup> This is one of the first steps for India in naval modernization with increasing indigenous material for use in its navy assets. Prime Minister Narendra Modi announced in 2015 the development of a new, stronger maritime strategy for India that sets the Indian Ocean as a priority of foreign policy with maritime dominance as a goal.<sup>2</sup> This one indication that Indian Navy is taking a more active role with regard to security in South Asia, using state-of-the-art technology that is developed and produced by Indians at home.

### A. MAJOR RESEARCH QUESTION

These developments conform to Admiral R.K. Dhowan's strategic guidance for the Indian Navy in which the navy strives to ensure secure seas for economic development by maintaining combat-ready forces in the Indian Ocean.<sup>3</sup> Admiral Dhowan, a retired Indian chief of naval staff, was pivotal in devising India's new maritime strategy. This thesis examines the important factors that determine India's new maritime strategy. Specifically, how do threats to national security, economics, and domestic politics help shape maritime strategy for India?

### B. SIGNIFICANCE OF THE RESEARCH QUESTION

The significance of this research question cannot be overstated when one considers the geopolitical position India finds itself in with respect to the Indian Ocean

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<sup>1</sup> Vinaya Deshpande, "Indian Navy's Stealth Destroyer Launched," *Hindu*, 20 April 2015, <http://www.thehindu.com/news/national/navy-launches-stealth-destroyer-ins-visakhapatnam/article7122363.ece>.

<sup>2</sup> Abhijit Singh, "India: Maritime Strategy and 'Brand-Building,'" *Diplomat*, 24 December 2015, <http://thediplomat.com/2015/12/india-maritime-strategy-and-brand-building/>.

<sup>3</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas: Indian Maritime Security Strategy*, Naval Strategic Publication (NSP) 1.2, (New Delhi: Integrated Headquarters, Ministry of Defense (Navy), 2015).

and its surrounding Asian neighbors as well as its impact on maritime security in the South Asian region. India, as a sovereign nation that increasingly sees itself playing a global role, feels it has the right to build and develop a naval force with its own priorities and strategies to implement that force. This research adds depth to existing knowledge of how India develops and implements their maritime strategy.

India is the largest country within South Asia and the second largest in the world, possessing the potential to become a great maritime power in the region. With this in mind, India's maritime strategic developments can benefit in the future from this research and exploration into the variables that are currently shaping modern Indian maritime strategy. Additionally, understanding these factors is considerably significant to India's neighbors in the region who may wish to pursue development or transformation of their own maritime strategy in order to share the burden of providing maritime security in the Indian Ocean region (IOR).

India's new maritime strategy will significantly change maritime security in the IOR; therefore, understanding what shapes this strategy is significant to the rest of the world, as well. The merchant shipping routes of the Indian Ocean include over eighty percent of the global seaborne oil trade, supporting Asia's economic health and marking it one of the most strategically important maritime routes in the world.<sup>4</sup> Indian maritime strategy affects American foreign policy, as well. The IOR is within the United States Pacific Command's (USPACOM) area of responsibility (AOR) with India serving as a prime maritime security partner in the region.<sup>5</sup> Understanding what shapes this strategy will help American foreign policy makers and strategists to better optimize maritime security in the IOR with India and her neighbors.

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<sup>4</sup> Sergei DeSilva-Ranasinghe, "Why the Indian Ocean Matters," *Diplomat*, 2 March 2011, <http://thediplomat.com/2011/03/why-the-indian-ocean-matters/>.

<sup>5</sup> See White House article on U.S.-India Joint Strategic Vision, <https://obamawhitehouse.archives.gov/the-press-office/2015/01/25/us-india-joint-strategic-vision-asia-pacific-and-indian-ocean-region>.

## C. LITERATURE REVIEW

The literature review is separated into three parts: general maritime strategy, maritime strategy specific to India and the IOR, and the significance of the Indian Ocean with respect to regional relations. While there certainly is an abundance of literature on maritime strategy, little addresses specifically Indian maritime strategy in contemporary terms because it was not until recently that India took a forward and direct approach to employing forces on the high sea.

### 1. Maritime Strategy

Captain Alfred Thayer Mahan is often considered the father of the maritime strategy. Those seeking to bolster fledgling navies and maritime strategy have read *The Influence of Seapower upon History 1660–1783* for decades. Mahan asserts that maritime strategy is essential in both times of war and peace and should be considered significant to individuals involved with foreign policy making as it adds to a nation's overall sea power.<sup>6</sup> His thesis suggests that the use and control of the sea has shaped the histories of Europe and America and through the examination of their history from 1660–1783, aims to persuade American foreign policy makers to continue to invest in a strong navy. The measure of his successful influence can be seen in the might of the American Navy today. Mahan goes on to note that part of a requirement for a nation to expand its overseas economic endeavors is a powerful navy to ensure defense of the sea-lines of communication (SLOC) for merchants to rely on while engaged in trade.<sup>7</sup>

Additionally, Mahan discusses the six characteristics of countries that contribute to the strength and expansion of a nation's sea power negatively or positively: geographical position, physical conformation, extent of territory, number of population, character of the people, and the character of the government.<sup>8</sup> Decisive fleet action with large-scale naval battles comprising large capital warships and battleships was Mahan's

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<sup>6</sup> Alfred Thayer Mahan, *The Influence of Seapower upon History 1660–1783* (Boston: Little, Brown and Company, 1890), 22–23.

<sup>7</sup> Ibid., 25–27.

<sup>8</sup> Ibid., 28–59.

vision. His works influenced several naval theorists and national strategists around the world, including those in Germany, China, and India.<sup>9</sup> Indeed, Indian naval theorists consistently cite and invoke Mahan’s work and theory.<sup>10</sup> Retired Lieutenant Commander Ben Armstrong’s theories are critical for a contemporary analysis of Captain Mahan in *21<sup>st</sup> Century Mahan*. Armstrong’s main argument from Mahan is that strategic military policies have to be in line with political and economic realities of the nation, and at the same time, the nation’s fleet must be deployed in peacetime with consideration given to the requirements of war strategy.<sup>11</sup> Finally, Armstrong argues that a nation’s navy is the key component in any war that involves commercial competition in the globalized economy.<sup>12</sup> While these ideas are not certainly unique to Mahan, modern theorists may find it difficult to disagree.

The other “father” of naval strategic theory is Sir Julian Corbett, a British naval historian and strategist, who is often considered the antithesis to Mahan. If Mahan’s work is known for emphasis on victory *on* the sea, Corbett’s emphasis is on victory *from* the sea. While Corbett agrees with Mahan that “the object of naval warfare must always be directly or indirectly either to secure the command of the sea or to prevent the enemy from securing it,” he insists that a nation’s grand strategy cannot be looked at from naval operations alone.<sup>13</sup> Corbett argues that when determining the strategy for any conventional war, states should carefully determine what part the fleet will play in relation to the army since victory cannot be decided by naval action alone.<sup>14</sup> This argument stems from Corbett’s idea that “since men live upon the land and not upon the

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<sup>9</sup> See Admiral Alfred von Tirpitz (1849–1930), David Scott’s “India’s Grand Strategy for the Indian Ocean: Mahanian Visions,” and Toshi Yoshihara and James Holmes’ “Can China Defend a ‘Core Interest’ in the South China Sea?”

<sup>10</sup> See K. Panikkar’s *India and the Indian Ocean: An Essay on the Influence of Sea Power on Indian History* (Bombay: Allen & Unwin, 1971) and K. Vaidya’s *The Naval Defence of India* (Bombay: Thacker, 1949).

<sup>11</sup> Benjamin F. Armstrong, *21<sup>st</sup> Century Mahan: Sound Military Conclusions for the Modern Era* (Annapolis, MD: Naval Institute Press, 2013), 41–42.

<sup>12</sup> Ibid., 42.

<sup>13</sup> Julian S. Corbett, *Some Principles of Maritime Strategy* (Annapolis, MD: Naval Institute Press 1988), 91, xix.

<sup>14</sup> Ibid., 15.

sea, great issues between nations at war have always been decided...by what your army can do against your enemy's territory.”<sup>15</sup> Finally, Corbett analyzes Mahan by asserting that the notion that the “object of our battlefleet is to seek out and destroy that of the enemy” is insufficient because a naval force cannot primarily attack conventional land forces.<sup>16</sup> Mahan seems to be more centered on empirical historical evidence to support his thesis on maritime strategy, while Corbett focuses more on a theoretical side of maritime strategy to present his thesis. One of the points this thesis will make against Corbettian thought from the perspective of the Indian Navy is a modernized fleet capable of projecting power against land forces beyond their borders.

Another important work that stands out is by Rear Admiral Raja Menon, who was a submariner in the Indian Navy and later became the Assistant Chief of Naval Operations prior to retiring in 1994. *Maritime Strategy and Continental Wars* focuses on the constraints continental nations may face when employing a maritime strategy. This work is important because his work has shaped Indian strategy and he is considered one of the pioneers of India’s undersea warfare field, especially when it comes to India and the IOR. In the book, Menon proposes that the “Mahanian” view of grand fleet battle to route the enemy force became immaterial with the introduction of aircraft carriers and submarines into the picture of maritime strategy.<sup>17</sup> In fact, his arguments centering on maritime strategy are more in line with Corbett’s insistence of naval forces supporting land forces in times of war.<sup>18</sup> The success of a navy, according to Menon, exists because of its ability to conduct operations without interrupting the daily lives of the general public. Because navies do not have the public visibility because of their location at sea, as opposed to an army’s land operation, there is generally less priority on funding navies—yet they are critical for security.<sup>19</sup>

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<sup>15</sup> Ibid., 16.

<sup>16</sup> Corbett, *Some Principles of Maritime Strategy*, 156–7.

<sup>17</sup> Raja Menon, *Maritime Strategy and Continental Wars* (London: Frank Cass, 1998), 22.

<sup>18</sup> Ibid., 23. Also see Chapter II where he analyzes contemporary literature on maritime strategy in relation to continental warfare, using Mahan and Corbett as foundations of analysis.

<sup>19</sup> Ibid., 21.

Menon lays out the ideas of controlling strategic commodities, like food, in order to inflict extreme damage on an enemy economy in addition to controlling shipping lanes containing oil transport to restrict energy sourcing.<sup>20</sup> Surface navy proponents who follow Mahan's work may find Menon's views shaped by his service community in relation to maritime strategy. He argues that "of all types of naval warfare that are automatically conducted at the operational or strategic level, it is the submarine offensive and resultant anti-submarine campaign that are most important."<sup>21</sup> This obviously goes against the American devised power projection strategy of employing aircraft carriers and composite warfare strike groups. It is especially relevant because of the continued focus of the Indian Navy to invest in developing more aircraft carriers for their inventory in an attempt to increase blue-water capability and power projection in the IOR. With the revision to maritime strategy by current Indian leadership, things have changed since Menon wrote his book.

## **2. Indian Maritime Strategy**

Some important and selected region-specific literature provides an insight into the Indian maritime strategy over the years and the importance of India's role and the IOR. The first work is an article linking Captain Mahan's influence on Indian and Chinese Maritime Strategy published in the Indian *Naval War College Journal* by Commander Sibapada Rath. In his article, Rath suggests that the rapid globalization at the end of the twentieth century explains the pursuit of naval expansion in India, while the growth of overseas trade in India and increasing globalization of their markets warrants an increase in maritime trade defense. He essentially provides justification for Indian naval modernization.<sup>22</sup> This line of thought seems to paraphrase "Mahanian" strategic theory as Rath writes "the navy was simply the logical outgrowth of peaceful maritime commerce," implying that developing a navy was inevitable when a country maintained overseas trade

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<sup>20</sup> Ibid., 67–69.

<sup>21</sup> Menon, *Maritime Strategy and Continental Wars*, 8.

<sup>22</sup> Sibapada Rath, "Maritime Strategy of India and China: Influence of Alfred Thayer Mahan," *Naval War College Journal* 26 (2014), 71–79, [https://www.indiannavy.nic.in/sites/default/themes/indiannavy/images/pdf/resources/article\\_7.pdf](https://www.indiannavy.nic.in/sites/default/themes/indiannavy/images/pdf/resources/article_7.pdf).

via SLOCs.<sup>23</sup> Indian state appears to be following that idea. Furthermore, Rath believes that “Mahan had made a prophetic observation that whoever controls the Indian Ocean dominates Asia, and this ocean is the key to the seven seas,” implying it is only a matter of time before India becomes the dominant maritime force in the IOR as it places itself in a position to meet strong naval opposition from the Chinese.<sup>24</sup> As a career naval officer, Rath provides first-hand insight into Indian Maritime Strategy; however, most of his time was spent in the education center of the navy and focuses more on the theoretical than the practical application.

A collaborative piece by James Holmes, Andrew Winner and Toshi Yoshihara’s book *Indian Naval Strategy in the Twenty-First Century* is also an important piece for understanding theory and naval strategy around policies employed by New Delhi regarding the Indian Navy. Their argument centers on the fact that New Delhi employs a forward strategy as part of their national security philosophy that focuses on sea-based defense that could very well extend as far as into the Western Pacific ocean.<sup>25</sup> In one case, they use the analysis of C. Raja Mohan, a scholar of Indian national security, to suggest that if India is to become a “key player in international peace and security, it must possess both the will and capacity to contribute on a global plane,” to include the development of power-projection capabilities that go beyond the region of South Asia.<sup>26</sup> The authors further suggest that part of this power-projection capability will be the naval component of nuclear deterrence to which the Indian Navy expresses interest in achieving through the use of submarines.<sup>27</sup> Their contribution is important because they discuss the implications of China in the IOR, and how its expansion gives “strategic context for India’s own maritime rise;” China’s pursuit of energy security in the Indian Ocean presents possible increase in Chinese naval presence in the IOR, prompting an Indian

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<sup>23</sup> Ibid.

<sup>24</sup> Rath, “Maritime Strategy of India and China: Influence of Alfred Thayer Mahan,” 71–79.

<sup>25</sup> James R. Holmes, Andrew C. Winner, and Toshi Yoshihara, *Indian Naval Strategy in the Twenty-first Century* (London: Routledge, 2009), 61.

<sup>26</sup> Ibid., 74–77.

<sup>27</sup> Ibid., 97.

naval response.<sup>28</sup> They also give considerable thought to the impact on Pakistan when discussing Indian maritime strategy. The authors suggest that India's hostile relationship with Pakistan certainly has influence on its naval doctrine as sea control improves India's "capacity for maritime surveillance and undersea warfare...to blockade Pakistani ports in wartime."<sup>29</sup> However, it is difficult to separate Pakistan's naval priorities from China's as it relies on the superpower for defense support.

C. Raja Mohan's *Samudra Manthan* provides important analysis on Indian naval development and Sino-Indian rivalry in the IOR. In this, Mohan explains that in India there is a "fundamental shift...away from the traditional obsession of controlling land frontiers" and focusing on the protection of seaborne trade, which makes up most of India's foreign trade, establishing the basis for a renewed naval emphasis in India.<sup>30</sup> As have other scholars in his field, Mohan suggest that Mahan's work encourages policy makers and strategists to support maritime power and naval modernization, such as a new emphasis on aircraft carrier technology to increase power-projection and believes in the importance of its geopolitical impact on the region for India.<sup>31</sup>

### **3. Indian Ocean Significance and Indian Regional Relations**

The Indian Ocean region has gained a lot of attention lately due to an increased presence of Chinese maritime interests. It is important to address some of the literature that comes out of it and how it is relevant to India's maritime strategy. Robert Kaplan's *Monsoon: The Indian Ocean and the Future of American Power* addresses the significance and the future of power and maritime trade in the Indian Ocean. To begin, Kaplan shows the importance of the region, specifically in relation to the "principal oil shipping lanes, as well as the main navigational choke points of world commerce – the

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<sup>28</sup> Ibid., see Chapter VIII.

<sup>29</sup> Holmes, Winner, and Yoshihara, *Indian Naval Strategy*, 151.

<sup>30</sup> C. Raja Mohan, *Samudra Manthan: Sino-Indian Rivalry in the Indo-Pacific* (Washington, DC: Carnegie Endowment for International Peace, 2012), 2–3.

<sup>31</sup> Ibid., 3.

Straits of Bab el Mandeb, Hormuz, and Malacca.”<sup>32</sup> Kaplan provides some important statistics concerning maritime trade through the region: “Forty percent of seaborne crude oil passes through the Strait of Hormuz at one end of the ocean, and fifty percent of the world’s merchant fleet capacity is hosted at the Strait of Malacca.”<sup>33</sup> In addition to the massive amount of global trade going through the region, he also addresses the high degree of maritime security forces that transit through, including that of the nuclear powers: the United States, the United Kingdom, France, Russia, China, India, Pakistan, and Israel.<sup>34</sup>

The most significant aspect Kaplan speaks to is the potential for Sino-Indian rivalry in the IOR. He suggests that “competition between India and China...will play out less on land than in a naval realm” and that “China approaches the Indian Ocean as a landlocked power...bringing it into potential conflict with India.”<sup>35</sup> This potential rivalry stems from the need for maritime security in the IOR surrounding the maritime trade route. He also spends some time discussing non-state actors, specifically pirates. Kaplan asserts that “the Somali piracy crisis merely confirms a critical feature of the post-Cold War era: the rise of sub-state actors.”<sup>36</sup> Kaplan provides themes that reflect some of Mahan’s ideas, specifically that “naval power will be as accurate an indicator of an increasingly complex power arrangement as anything else.”<sup>37</sup>

Holmes and Yoshihara describe China’s and India’s expanding power as a strategic triangle with the United States in the IOR.<sup>38</sup> The scholars claim that their desires to become powerful states in the international arena stem not only from a pursuit of

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<sup>32</sup> Robert D. Kaplan, *Monsoon: The Indian Ocean and the Future of American Power* (New York: Random House, 2010), 7.

<sup>33</sup> Ibid.

<sup>34</sup> Kaplan, *Monsoon*, 8.

<sup>35</sup> Ibid., 13, 283–4.

<sup>36</sup> Ibid., 304.

<sup>37</sup> Ibid., 291.

<sup>38</sup> James Holmes and Toshi Yoshihara, “China and the United States in the Indian Ocean: An Emerging Strategic Triangle?” *Naval War College Review* 61, no. 3 (Summer 2008): 41. <http://handle.dtic.mil/100.2/ADA519091>.

increased energy security, but is a “natural outgrowth of impressive economic growth.”<sup>39</sup> In this, they assert that security in the IOR will depend largely on how well India is able to accomplish its naval modernization and growth lest they “essentially be forced to surrender its interests in regional waters, leaving a power vacuum to the United States and China.”<sup>40</sup> The authors gathered the continued understanding of Indian leadership acknowledging the importance of developing a more robust maritime strategy in the new century by looking at *Indian Maritime Doctrine*: “India’s primary maritime interest is to assure national security... not restricted to just guarding the coastline and island territories, but also...safeguarding our interests in the [exclusive economic zone] as well as protecting our trade...that is conducive to rapid economic growth of the country.”<sup>41</sup>

The authors acknowledge that rising maritime power in India has generated attention from superpowers like China and the United States. While Americans have an interest in maintaining their role in global maritime security, they discount the renewed progression of Indian sea power. The Chinese, by contrast, recognize the potential threat India poses to their interests in the region: “The Indian Ocean is a link of communication and oil transportation between the Pacific and Atlantic Oceans and India is just like a giant and never-sinking aircraft carrier and the most important strategic point guarding the Indian Ocean.”<sup>42</sup> They also believe that as India continues to progress in the maritime realm they will continue to develop doctrine that supports blue-water capability, such as aircraft carriers, to potentially operate in the Western Pacific, which has drawn the most concern from China.<sup>43</sup>

David Brewster presents his ideas in the roundtable discussion published in *Asia Policy* in which he states that “strategic competition between India and China in the Indian Ocean has the potential to profoundly affect the stability and security of the

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<sup>39</sup> Ibid., 41.

<sup>40</sup> Ibid., 42.

<sup>41</sup> Holmes and Yoshihara, “China and the United States in the Indian Ocean,” 44.

<sup>42</sup> Ibid., 50–51.

<sup>43</sup> Ibid., 53–54.

region.”<sup>44</sup> Brewster identifies China’s perceived vulnerability to state and non-state actors in the region to the point that their “primary strategic imperative in the IOR is the protection of its sea lines of communication across the Indian Ocean.”<sup>45</sup> This proposes an increase of Chinese maritime security in the IOR that could potentially come into conflict with the Indian Navy. Brewster also asserts that India is considered to be the nation that is destined for prominence in the IOR and perceives that foreign naval powers coming into the Indian Ocean, especially China, do not possess legitimate claims for reinforcing the area and are operating under the basis of India’s version of the “Monroe Doctrine.”<sup>46</sup> From this, Brewster believes that analysts and strategists in New Delhi maintain the perception that China’s growing relationships with other powers in the region, such as Pakistan, are directed against India in order to throw off their possible hegemonic balance in the IOR.<sup>47</sup> This suggests the possibility of an increasing naval arms race in the Indian Ocean to maintain control of the sea, especially at strategic chokepoints at either end of the Ocean to prompt possible interdiction of Chinese sea lines of communication.<sup>48</sup>

Rory Medcalf in the same issue of *Asia Policy* also addresses this increase in tension on Sino-Indian relations within the IOR. Medcalf establishes that this persistent strain on relations between Beijing and New Delhi dates back to the 1962 Sino-Indian War as well as Chinese military backing of Pakistan over the decades.<sup>49</sup> This argument suggests a consistent Chinese pressure against India for the last half century, which will continue in the coming years. Medcalf also points out China’s ability to project power within the IOR is ever increasing more to a point of demonstrating their capabilities to India rather than security of the shipping lanes. He specifically mentions that the Chinese Navy’s ability to deploy nuclear fast-attack submarines, such as the Shang-class,

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<sup>44</sup> David Brewster, “India and China at Sea: A Contest of Status and Legitimacy in the Indian Ocean,” *Asia Policy* 22 (July 2016): 4. doi: <https://doi.org/10.1353/asp.2016.0030>.

<sup>45</sup> Ibid.

<sup>46</sup> Brewster, “India and China at Sea,” 5.

<sup>47</sup> Ibid., 6.

<sup>48</sup> Ibid., 7.

<sup>49</sup> Rory Medcalf, “The Western Indo-Pacific: India, China, and the Terms of Engagement,” *Asia Policy* 22 (July 2016): 62, ProQuest document ID: 1810310043.

patrolling the Northern Indian Ocean, is not intended for counter-piracy or merchant security.<sup>50</sup> Medcalf believes New Delhi should increase the initiative in continuing to modernize their navy, as well as expand maritime partnerships in the region to form a multi-lateral security cooperative for deterrence against China, similar to NATO against the Soviet Union.<sup>51</sup>

Admiral Menon's piece in the same roundtable issue of *Asia Policy* assesses China's maritime strategy in the IOR and its implications and options for India. He points out three significant strategic disadvantages China faces in the IOR should conflict escalates: "By 2030, if the entire Indian Navy is deployed... it would outnumber PLAN [People's Liberation Army Navy] surface combatants by a ratio of two to one; a third Indian carrier has been commissioned with U.S. collaboration; Indian MPA [Maritime Patrol Aircraft] would still outnumber Chinese MPAs in the Indian Ocean...and air dominance, information dominance, and force dominance are clearly with India."<sup>52</sup> This raises a very significant point that China potentially will not be able to establish sea control in the Indian Ocean compared to their likeliness to do so in the South China Sea.

What about the United States position in the Indian Ocean? According to Michael Green and Andrew Shearer, the American's increasing focus to the IOR was driven by Kaplan's research in his *Monsoon*.<sup>53</sup> They argue that while there is a multitude of security issues in the IOR facing the United States, such as "competition over resources, climate change, piracy, terrorism, proliferation, great power rivalry," etc., the key interest for America is for a "secure highway for international commerce between the Gulf States and East Asia."<sup>54</sup> The authors also believe that the IOR is an important region in today's world for the United States because it could possibly transition into an arena for intense,

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<sup>50</sup> Ibid.

<sup>51</sup> Ibid., 65–66.

<sup>52</sup> Raja Menon, "India's Response to China's Naval Presence in the Indian Ocean," *Asia Policy* 22 (July 2016): 47, ProQuest document ID: 1810309530.

<sup>53</sup> Michael Green and Andrew Shearer, "Defining U.S. Indian Ocean Strategy," *The Washington Quarterly* 35, no. 2 (Spring 2012): 175, doi: 10.1080/0163660X.2012.666925

<sup>54</sup> Ibid., 176–7.

possibly kinetic, rivalry between China and India.<sup>55</sup> This may potentially require the U.S. to extend their fleet patrols into the Indian Ocean as well as in the South China Sea.

John Bradford also weighs in on American focus in the IOR. Bradford, an American naval officer, discusses certain concepts from America's maritime strategy published in 2007 that calls to "deter and dissuade potential adversaries and peer competitors."<sup>56</sup> He also believes that for the United States, piracy attacks in the Western Indian Ocean are a greater threat than warrant attention from the international community; this is extremely relevant to Indian leadership because Somali pirates tend to operate closer to Indian territorial waters than the Horn of Africa.<sup>57</sup> So far, the response of the United States to hostile non-state actors focus on building and supporting coalition forces to deter attacks, most notably the Combined Task Force 151, which is commanded by officers from many nations around the world, including Pakistan.<sup>58</sup> America's military power, according to Bradford, is becoming increasingly more capable through their multi-lateral maritime partnerships and forward deployed forces, to include a nuclear aircraft carrier stationed in Japan augmented by an All-Aegis Destroyer Squadron whose patrol responsibilities include the IOR.<sup>59</sup>

Going with the theme of continuing strengthening of regional partnerships, Stephen Burgess stresses that the Indian Navy will be an important factor in assisting America maintain a strategic and security balance in South Asia, specifically in helping provide anti-piracy and anti-submarine patrols among the shipping lanes between the Gulf of Aden and the Strait of Malacca.<sup>60</sup> Burgess, a professor of international security studies at the U.S. Air War College, argues that India taking on a large role is beneficial

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<sup>55</sup> Ibid., 178.

<sup>56</sup> John Bradford, "The Maritime Strategy of the United States: Implications for Indo-Pacific Sea Lanes," *Contemporary Southeast Asia* 33, no.2 (2011): 186, doi: 10.1355/cs33-2b. In addition, see *A Cooperative Strategy for 21<sup>st</sup> Century Seapower* originally published in 2007 and revised in 2015, <http://www.navy.mil/local/maritime/150227-CS21R-Final.pdf>.

<sup>57</sup> Ibid., 190.

<sup>58</sup> Ibid., 191.

<sup>59</sup> Ibid., 192–3.

<sup>60</sup> Stephen Burgess, "The U.S. Pivot to Asia and Renewal of the U.S.-India Strategic Partnership," *Comparative Strategy* 34, no. 4 (2015): 372, doi: 10.1080/01495933.2015.1069517.

to the United States because it will allow them to shift the focus of the navy eastward in the IOR and it puts them in a better position to assist India should China push their anti-access/area-denial (A2/AD) tactics to the Indian Ocean.<sup>61</sup> With a focus on supporting India's drive to modernizing their navy, the United States needs to remain cautious at the potential response from Pakistan. As Jan Hornat points out, with American interests in ongoing operations in Afghanistan, the United States needs to retain a degree of good relations with Islamabad, placing America in between two historic rivals.<sup>62</sup>

In the discussion of Indo-Chinese rivalry in the IOR, one also needs to take into account China's string of pearls strategy, which has brought some of India's primary rivals under its umbrella. Pakistan's maritime strategy, for instance, cannot be understood without China. Is Pakistan not worried about India's power expansion into IOR? Daniel Kostecka's piece in *Naval War College Review* describes how China's push for shore-based logistics in the Indian Ocean was predicated on the constant deployment of PLAN ships to the Gulf of Aden in order to protect merchant shipping from pirates who are operating from the Horn of Africa.<sup>63</sup> This precipitates a need for Chinese cooperation with South Asian nations, most notably Pakistan. Kostecka's discusses that while Chinese warships continue attempts to resupply out of Salalah in Oman, there is considerable Chinese investment in the port of Gwadar in Western Pakistan to an end of turning it into a "Chinese version of Gibraltar or even Pearl Harbor."<sup>64</sup> While Gwadar may be a potential location for PLA forces in Pakistan, Kostecka believes that it is far more likely that Chinese leadership will pursue replenishment options in Karachi, building on 25 years of maritime partnerships with Pakistan to make this a reality.<sup>65</sup>

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<sup>61</sup> Ibid., 372. For a discussion on A2/AD, see Major Christopher McCarthy's paper "Anti-Access/Area Denial: The Evolution of Modern Warfare," <https://www.usnwc.edu/Lucent/OpenPdf.aspx?id=95>.

<sup>62</sup> Jan Hornat, "The Power Triangle in the Indian Ocean: China, India, and the United States," *Cambridge Review of International Affairs* 29, no. 2 (2016): 436, doi: 10.1080/09557571.2014.974507.

<sup>63</sup> Daniel Kostecka, "Places and Bases: The Chinese Navy's Emerging Support Network in the Indian Ocean," *Naval War College Review* 64 no. 1 (Winter 2011): 59, ProQuest document ID: 865741799.

<sup>64</sup> Ibid., 60, 70.

<sup>65</sup> Ibid., 71.

The historic rivalry between India and Pakistan has usually manifested itself over the years in a “tit-for-tat” concept that Iskander Rehman explores in *Naval War College Review*. Rehman discusses that the launch of the Arihant, India’s first nuclear ballistic missile submarine, forced Pakistan to take a critical look at the South Asian Nuclear problem, which until 2009, did not involve sea-based delivery of nuclear weapons.<sup>66</sup> Rehman further asserts that the nuclear posture that Pakistan has adopted serves the asymmetric purpose of counter-balancing the conventional superiority of the overbearing Indian military.<sup>67</sup> With India’s sea-based nuclear deterrent, and the raid on Osama bin Laden’s compound inside Pakistan’s borders by American special forces, Pakistan’s anxieties over the security of their nuclear arsenal are calmed with China providing investment into Pakistan’s shipbuilding industry and their presence in the Indian Ocean to offset India rapidly modernizing their navy.<sup>68</sup>

#### D. POTENTIAL EXPLANATIONS AND HYPOTHESES

This thesis evaluates the analytical merits of two potential answers to the research question. The first hypothesis is that the new Indian maritime strategy is influenced solely by a potential security threat from People’s Republic of China (PRC). China’s growing naval presence in the Indian Ocean may be a danger to New Delhi’s interests in the region where maritime doctrine was developed, in conjunction with naval modernization, to counter the expanding threat China poses on the sea. Specifically, India wants to prevent China from establishing permanent forward naval bases in the Indian Ocean to keep the reach of the Chinese Navy as far as possible. This research tested this hypothesis specifically. I anticipated discovering evidence that shows China is aggressively continuing to push maritime patrols into the Indian Ocean to protect their interests, provoking a likely response from India. In addition, I expected that most of the documentation for Indian naval doctrine is written with a large focus on deterring China

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<sup>66</sup> Iskander Rehman, “Drowning Stability: The Perils of Naval Nuclearization and Brinkmanship in the Indian Ocean,” *Naval War College Review* 65, no.4 (Autumn 2012): 65, ProQuest document ID: 1036961008.

<sup>67</sup> Rehman, “Perils of Naval Nuclearization,” 68.

<sup>68</sup> Ibid., 70–73.

in order to secure their own interests in the IOR. China's increases in building Maritime Domain Awareness in the IOR may additionally prompt an American response that would undoubtedly further foster a US-India alliance to keep China at bay. In reality, the research showed that this was not the case. The PRC was a factor in determining the security situation for India in the development of *Ensuring Secure Seas*, however, there were other factors that will be covered in the conclusion.

The second hypothesis that was probable and less likely to provide an explanation is the economy in India. I believe that as a result of India's growing economy, more emphasis will be placed on globalization and overseas trade, prompting a push to more merchant shipping to include seaborne energy transportation. As a result, the Indian Navy will need to provide several measures of security in the IOR to ensure that the Indian economy is not subject to intense fluctuation due to piracy or lack of secure trade within the shipping lanes of the Indian Ocean. This hypothesis may not be mutually exclusive to the threat of China since the Chinese Navy could threaten India's seaborne trade and the research may show domestic economic concerns having a mutual relationship with security threats within the region. My research will examine this by looking at India's trade in the IOR. I anticipate finding a relationship between global trade in the IOR and India's domestic economy. Specifically, I wish to identify how much of their economy relies on external and how much of that will be affected should India lose access to it. In addition to commercial trade, I anticipate to see a link to India's energy security in the IOR with respect to natural resources to include petroleum and other reliant imported sources of energy. This hypothesis supports Mahan's views on how a nation's economic survival is predicated on global overseas trade, which arouses a need for maritime security.

## **E. RESEARCH DESIGN**

The focus of this thesis is to attempt to understand the driving factors of India's maritime strategy. To accomplish this, the research will be concentrated on examining the empirical evidence as to the driving causal factors of maritime strategy for India. Specifically, the process will focus on examining regional threats pertaining to India's

maritime forces, economic policies and trends surrounding the shipping lanes of the Indian Ocean, and civil-military relations driving these processes between the civilian administration in New Delhi and the Admiralty.

The security against maritime based-threats will focus specifically on China, Pakistan, and various non-state actors to include piracy on the high seas. From this, I anticipate to discover the driving factors of the Indian Navy's fighting structure as well as its material conditioning and modernization process to support the new strategy. Since the new maritime strategy is relatively recent, I do not expect there to be much literature in the form of books pertaining to this and will have to rely more on recent journal and news articles as well as documents released by the Indian government. Additionally, there is some material written by fellow American Armed Services officers in pertaining to the subject in the form of Master's theses and dissertations that warrant examination. There may be challenges to overcome with the language barrier but I am confident there will be sufficient material in English written in India and around the world among maritime theorists and scholars.

The economics of the Indian Ocean perspective will specifically examine maritime trade to include exports and imports for India, merchant shipping transiting through the Indian Ocean, and some elements of energy security for India and the IOR in terms of seaborne oil shipping. Counter-piracy and Sino-Indian relations will play into the section of the research because the necessity for protection of the sea lines of communication in the case of both India and China. This also touches on energy security because of the high-density traffic of oil and gas merchant shipping transiting through the Indian Ocean. There will be more of an abundance of this type of material available, but the difficulty may lie in narrowing it down to pertaining to maritime security and strategy.

Finally, the research will look at evidence suggesting the influence of domestic politics influencing maritime strategy for India. This section of the research may have to rely more on already developed and published interviews with Indian civil administration and members of the military cabinet and Admiralty. I do not intend to conduct stand-alone interviews for this section of research. In addition, I intend to rely on other

literature that focuses on domestic politics. It is anticipated that there will be more in abundance of material pertaining to India's military overall and less specifically focused on the navy. It will be interesting to see if the recent focus on indigenous development of naval material for India was something pushed by leadership in the navy or if it was from the civil-administration of possibly a combination of the two.

#### **F. THESIS OVERVIEW**

The thesis will be broken into five chapters, the first of which is the introduction, containing the literature review of the topic and initial hypothesis. Chapter II examines the IOR and the various players with stakes in it, looking at trade and interactions between nations and non-state actors, as well as maritime capability. Chapter III explores India's modernization of naval platforms and their role in the IOR in relation to Admiral Dhowan's maritime strategy. Chapter IV looks at India's economy and how it relies on the IOR, necessitating the need to security by the Indian Navy, along with domestic politics harboring the need for overseas trade and maritime security. The thesis concludes with Chapter V, containing the research findings, areas for further study, and concluding thoughts.

## **II. THE INDIAN OCEAN: ACTORS AND THEIR RELATION TO INDIA**

The purpose of this chapter is to describe the significance of the Indian Ocean relative to specific key players and their maritime power relative to India. The chapter will consist of some background information on the Indian Ocean along with its significance to the global economic order. Following, this chapter will examine some of the key maritime players in the region, looking at the significance of the Indian Ocean to them, their maritime capability, and a brief analysis of their threat perception toward India and her navy. Finally, the chapter will look at some of the elements of non-state actors in the region to include piracy and maritime terrorist activities.

### **A. BACKGROUND AND SIGNIFICANCE**

The Indian Ocean presents a vast perplexity that serves as a focal point for and connects the many continents of the world, most of which contained nations that have enjoyed the pleasures of building an empire around this entity. It is without a doubt that this maritime highway is utilized for trade, transportation, and lines of communication early in human history, possibly when humans first took to the waves aboard wooden vessels. According to Sanjeev Sanval, during the first two centuries of trade with the Roman Empire, “hundreds of ships ventured between the west coast of India, the Red Sea and the Persian Gulf.”<sup>69</sup> This could be marked as one of the first recorded instance of continual trade routes that utilized the Indian Ocean as a commercial highway, laying the foundation for regional, and eventually global, maritime trade in future centuries. Historians point to the fifteenth century as the culminating point where the Indian Ocean truly entered the period of world trade. Vasco de Gama’s voyages to India from Europe effectively opened up the IOR to the rest of the world in a time where empires competed for territory and economic power. Ferenc Váli attributes de Gama’s voyage as a beginning to Portuguese monopolism in the IOR and essentially “opened up the trade

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<sup>69</sup> Sanjeev Sanval, “The Indian Ocean: A Historical Perspective.” *ISAS Insights*, no. 400, 11 April 2017, <https://www.isas.nus.edu.sg/ISAS%20Reports/ISAS%20Insights%20No.%20400%20-%20The%20Indian%20Ocean.%20A%20Historical%20Perspective.pdf>.

route to the treasures of the Indian Ocean.”<sup>70</sup> Not only does this period mark the beginning of international maritime trade for the IOR, but also the dawn of foreign intervention and dominion into South Asia, especially by European trade powers. Váli asserts this notion by suggesting the Portuguese achieved much more than commercial enterprise in the region, in creating a divide between European powers and the Muslim communities, by securing resources from the region and delivering them to the West.<sup>71</sup> This strife surrounding foreign intervention would be the beginning in a series of tensions that culminate in today’s South Asian region.

The introduction of other trading empires and enterprises into the IOR diminished the effects on Portuguese trade power in the region. Váli argues that the declining influence of Portugal’s power over the IOR was largely due in part to historical developments in Europe when King Phillip II took the throne through inheritance and dragged the nation through bloody wars against and Dutch.<sup>72</sup> A decline in Portuguese influence introduced the rise of the Dutch, French and British powers into the region to operate their trading empires freely, accumulating power and influence over the inhabitants of South Asia. British victory in the Seven Years War (1756-1763) prompted the annexation of French Canada, delivering a decisive blow to French influential power globally. This, according to Váli, largely eliminated French power and Influence in India, giving British monopolist reign to operate their trade empire in the IOR.<sup>73</sup> Subsequent British victory following the Napoleonic Wars further imbedded British influence and rule over the Indian subcontinent, offering further control and influence in the Indian Ocean for trade and lines of communication. The mutiny of 1857 gave opportunity for the Empire to eliminate the last of Mogul leadership in the region, allowing Queen Victoria to establish herself as Empress over the British Raj.<sup>74</sup>

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<sup>70</sup> Ferenc Váli, *Politics of the Indian Ocean Region: The Balances of Power* (New York: The Free Press, A Division of Macmillan: 1976), 7.

<sup>71</sup> Ibid., 7.

<sup>72</sup> Ibid., 9–10.

<sup>73</sup> Ibid.,12.

<sup>74</sup> Ibid., 14.

British rule in South Asia lasted nearly another century; however, the economic and political hardships the empire faced during World War I took a serious toll on their political influence globally. Additionally, surviving a second World War put the British Empire in a serious state of compromise, along with the rest of the western world, as Europe would be on a road to recovery physically, mentally, and economically. Váli asserts that “the fact that Western dominance had been eliminated in some areas and jeopardized in others largely contributed to the campaigns for independence which took place all around the periphery of the Indian Ocean.”<sup>75</sup> The most notable of these would be the 1947 partition of the Indian sub-continent into India and Pakistan, setting a very bleak outlook for the British in the post-war period for South Asia. The partition effectively served as an end of rule and influence of the British Empire over the IOR in its entirety. The state the British left South Asia became a point of serious debate as the years that followed saw several wars and conflicts, not just between India and Pakistan themselves, but with insurgency and other great powers like China, culminating in a border war in 1962. The contradictions of South Asia make it a dynamic place, is an area rife with kinetic and political conflict and yet, the stability of its countries serve as one of the most important points of global trade compared to any other place in the world.

According to Shivshankar Menon, “in the last twenty-five years, the Indian Ocean has evolved....into a major global intersection for economy, resources and environment and increasingly for geostrategic issues.”<sup>76</sup> Geographically, the Indian Ocean is incredibly important, containing two of world’s most critical chokepoints in terms of trade and energy security: the Straits of Hormuz and Malacca at opposite ends of the ocean. According to James Russell, the stability and accessibility of these strategic chokepoints influence the global economy that depends on uninterrupted flow of sea-going trade.<sup>77</sup> This is due to “an estimated one-half of the world’s container ships

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<sup>75</sup> Váli, *Indian Ocean Region*, 20.

<sup>76</sup> Shivshankar Menon, “Security in the Indian Ocean,” *ISAS Insights*, no. 399, 11 April 2017, <https://www.isas.nus.edu.sg/ISAS%20Reports/ISAS%20Insights%20No.%20399%20-%20Security%20in%20the%20Indian%20Ocean.pdf>.

<sup>77</sup> James Russell, “The Indian Ocean,” in *Maritime Strategy and Global Order: Markets, Resources, Security*, eds. Daniel Moran and James Russell (Washington, DC: Georgetown University Press, 2016), 184.

regularly traverse this ocean, along with one third of its bulk cargo traffic and two-thirds of its oil supplies.”<sup>78</sup> Due to the importance of global and regional energy security and economics, the straits and trade lanes that connect the IOR to the rest of the world present a serious strategic security issue as the world continues to rely more on oil and trade going through this area. Russell points out that between over a dozen oil tankers, 17 million barrels of oil transited through the Strait of Hormuz *daily* in 2013; these numbers have gone up by approximately two million from 2009.<sup>79</sup> This trend points to continued growth in trade, especially with extremely energy-dependent nations such as India and China relying on this uninterrupted flow of oil to fuel their nations.

In addition to commercial and energy trade going through the IOR, there is also a considerable enterprise in raw materials that can be gathered from within and below the ocean itself. According to Pervaiz Cheema, “the seabed of the Indian Ocean is said to be strewn with trillions of poly-metallic nodules containing manganese, copper, cobalt and nickel calculated to last for centuries against the land reserve which would last for only 25 years.”<sup>80</sup> This represents a potential arena for increased tensions as outside of the littoral nations’ exclusive economic zones (EEZ), these seabed deposits are open to enterprising by regional and extra-regional players. Economic incentives need to be paired alongside littoral security interest for all parties involved in the exploitation of the various EEZs. As raw materials and resources begin to diminish on one’s land territory, these nations will undoubtedly look to the sea and potentially contest other nations in the maritime realm.

Cheema also suggests that the terrorist attacks of September 2001 have created a new security environment that has pushed major stakeholders to place additional focus on their maritime power.<sup>81</sup> This relates to the major causes of instability within the Indian Ocean, as argued by Cheema: terrorism, piracy, illegal fishing, regional conflicts,

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<sup>78</sup> Russell, “The Indian Ocean,” 184.

<sup>79</sup> Ibid.

<sup>80</sup> Pervaiz Iqbal Cheema, “Indian Ambitions in the Indian Ocean and the Pacific Rim: The Response of Global and Regional Powers,” *Journal of European Studies* 28, no. 2 (December 2012): 12, ProQuest document ID: 1317166047.

<sup>81</sup> Ibid., 16.

militarization, the presence of non-state actors, and weak regional organizations.<sup>82</sup> These points raise the questions of what these major players think about the Indian Ocean region; specifically for the purpose of this chapter, what does the United States, China, and Pakistan see within the Indian Ocean? For the United States, Cheema argues for the freedom of the seas within the American perspective: free access to oil with no “unfriendly” country dominating the region, possible containment of China, supporting operations in Afghanistan, containing terrorist networks through surveillance, and restraining Iran’s nuclear ambitions.<sup>83</sup>

For China, there is focus on preventing domination of regional and global powers over the Indian Ocean in an effort to maintain a free flow of energy supplies through critical sea routes as well deepening relations with the littoral states.<sup>84</sup> Cheema sees the main objective as edging toward pursuing economic and commercial gains vice military expansion into the IOR.<sup>85</sup> Meanwhile, for Pakistan, their objectives evolve from viewing India as a growing maritime power as well as furthering regional ambitions: securing their own SLOCs and maritime endeavors as well as concern about close ties between the United States and India.<sup>86</sup> The remainder of the chapter will focus on the key actors in the Indian Ocean, their relations with India, naval capacity and strength, and finally, analyze them as a potential maritime security threat toward India.

## B. UNITED STATES

Founded in 1775, the United States Navy (USN) is considered one of the most powerful navies in the world, both in terms of manpower and ships, as well as technology and firepower. Today, the USN currently employs 236 active commissioned ships that include aircraft carriers, surface combatants, submarines, and amphibious and mine

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<sup>82</sup> Cheema, “Indian Ambitions in the Indian Ocean,” 16.

<sup>83</sup> Ibid., 17.

<sup>84</sup> Ibid., 17–18.

<sup>85</sup> Ibid.

<sup>86</sup> Ibid., 21.

warfare ships, as well as fleet logistics and combat support vessels.<sup>87</sup> The preponderance of American maritime power certainly comes from their ability to project power far beyond its territorial borders through the use of aircraft carriers and strike capabilities. Typically, USN assets are deployed in carrier strike groups (CSGs) consisting of aircraft carriers with embarked air wings and guided missile cruisers and destroyers (CG/DDG) to provide anti-submarine warfare screening and air defense for the main force. Notionally, but not often in practice, nuclear fast-attack submarines (SSN) will deploy with CSGs to augment undersea warfare capabilities for the main force. In addition to CSG deployments, the USN has considerable guided-missile strike capabilities employed from CG, DDG, and guided-missile nuclear submarines (SSGN) utilizing the Tomahawk land attack missiles. America's power projection is exponentially expanded by its standoff strike capability that targets key military and civil infrastructure, including command and control nodes, inside of enemy territory. Additionally, the USN employs DDGs and CGs that are equipped with the Aegis Ballistic Missile Defense (BMD) system as strategic theater assets as part of the Global BMD system, capable of counter regional BMD threats as well as defending the American homeland from intercontinental ballistic missiles (ICBM). Finally, the USN utilizes nuclear ballistic missile submarines (SSBN) equipped with the nuclear Trident submarine launched ballistic missiles (SLBM). These boats act as one of the legs of America's strategic nuclear deterrent and can serve as first- or second-strike platforms in the event of a nuclear conflict.

The USN has operated in the maritime theater of war in the American War for Independence, the War of 1812, the American Civil War, the Spanish-American War, and two World Wars. Additionally, the American Navy has deployed in combat operations outside of declared wars, most notably the entirety of the Cold War, the first Iraq war as well as the past decade in the Global War on Terror. This suggests an incredible capacity for the USN to wage war and conduct operations in the littorals as well as in the open ocean. As a result, the USN is a considerably combat tested and proven maritime fighting force with the technological, economic, and political capacity to

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<sup>87</sup> “Fleet Size,” *Naval Vessel Registrar*, last modified 16 June 2017, <http://www.nvr.navy.mil/NVRSHIPS/FLEETSIZE.HTML>.

sustain maritime combat operations abroad. This can be strictly applied to the IOR through the U.S. capacity of deploying multiple strike groups to the region with the ability to patrol the SLOCs as well as the strategic chokepoints at either end of the ocean. The expeditionary and power projection capabilities USN make the Americans a formidable, if not overpowered, maritime player in the Indian Ocean.

## **1. United States and the Indian Ocean**

This chapter touched on the global geostrategic significance of the Indian Ocean in terms of economic and energy security. The same is true with respect to the United States and can be seen in their strategic foreign policy statements throughout the various administrations, most notably with the Obama administration. In 2012, the United States performed a strategic “pivot” toward the Indo-Pacific region, along with greater Asia overall. The rebalancing of forces and posture toward South and East Asia is seen in the Department of Defense’s *Strategic Guidance*: “U.S. and economic security interests are inextricably linked to developments in the arc extending from the Western Pacific and East Asia to the Indian Ocean region and South Asia.”<sup>88</sup> While America’s Navy typically views itself as a “two-ocean” navy, namely the Atlantic and Pacific, this renewed focus and pivot to include the Indian Ocean is not all that surprising given American interests in the region.

According to Timothy Hoyt, American military commitments in the Middle East, increasing expansion of the PRC navy and their push beyond the South China Sea into the IOR, and the shift of the global economy toward the greater Asian region to ensure energy security.<sup>89</sup> As a global economic power, the United States finds itself connected and dependent on global trade, and thus sees the major maritime trading route that is the IOR as a great strategic concern. Hoyt parses this idea out, not only drawing on the American maritime strategy, *Cooperative Strategy for 21<sup>st</sup> Century Seapower (CS21)*, but also from the 2010 *Quadrennial Defense Review* in which America acknowledges that

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<sup>88</sup> Burgess, “U.S. Pivot to Asia,” 367.

<sup>89</sup> Timothy Hoyt, “India in the U.S. Naval Strategy,” in *India’s Naval Strategy and Asian Security*, eds. Anit Mukherjee and C. Raja Mohan (London: Routledge, 2016), 128.

“Asia is emerging as the hub of the global economy.”<sup>90</sup> Given the nature of ongoing conflicts in Iraq and Afghanistan, the threat of piracy in the IOR, and the dependence on uninterrupted trade within the Indian Ocean, the United States finds itself in a position of net security guarantor for the region. The USN is the primary element with credible power projection capabilities that can carry this out. A rising maritime prowess in India and China, however, presents a possible competition or burden-sharing opportunity for ensuring maritime security and stability in the IOR.

John Bradford compares the emerging picture of a naval arms race in the IOR as equivalent to American-Soviet naval rivalry during the Cold War: “We will not permit conditions under which our maritime forces would be impeded from freedom of maneuver and freedom of access, nor will we permit an adversary to disrupt the global supply chain by attempting to block vital sea-lines of communication and commerce.”<sup>91</sup> Bradford implies that the United States focus will be maintaining a sufficient enough presence to ensure global trade is not impeded in the IOR as well as deterring an area-denial strategy other great maritime powers could employ to damage the United States economically. Given the state of the PRC and Indian economies today, they would surely have the capacity to surge naval forces into the region to be able to contest American maritime power, should conditions escalate and tensions increase between these nations and the United States.

## **2. U.S.–Indian Relations**

India’s strict affinity for its “strategic autonomy” as a regional hegemon leads its leadership to remain cautious about entering into alliances with extra-regional powers, especially the United States.<sup>92</sup> The historical posture of Indian “non-alignment” throughout the Cold War and historical partnership between the United States and Pakistan are additional factors that make a U.S.-India alliance something of a pipedream.

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<sup>90</sup> Timothy Hoyt, “The Indian Ocean and U.S. National Security Interests,” in *Deep Currents and Rising Tides: The Indian Ocean and International Security*, eds. John Garofano and Andrea Dew (Washington, DC: Georgetown University Press, 2013), 275.

<sup>91</sup> Bradford, “Maritime Strategy of the United States,” 185.

<sup>92</sup> Burgess, “U.S. Pivot to Asia,” 373.

This notion is severely affected and augmented by the fact of the current Bharatiya Janata Party (BJP) in power that contains a foundation of strict Hindu nationalism. With all this in mind, however, given a PRC shift toward favorable Pakistan relations as well as their focus on strengthening relations with India's littoral neighbors, a push for a U.S.-India cooperative security arrangement seems likely. Burgess believes the new BJP government's ambition to modernize its armed forces take on a larger maritime security role in the region gives the United States opportunities for interoperability and maritime partnership.<sup>93</sup> Hoyt offers some differing opinions on a modestly paced relationship in terms of advancement and growth. As the United States continues to remain the "leader of the free world," read as leading the liberal international order, India's emergence as a global economic power may present a challenge to this order.<sup>94</sup>

The largest point of contention that ultimately slashes the potential for a full U.S.-Indian strategic partnership is the relations with Pakistan. Burgess sees two perspectives coming out of India toward the U.S. alliance with Pakistan: "There are those who want the United States to woo Pakistan away from its close partnership with China. Others would like to see the United States move away from Pakistan and closer to India."<sup>95</sup> Until New Delhi sees headway on either strategic option from the United States, they are considerably less likely to move beyond anything resembling a regional strategic partnership to enhance economic and energy security via the SLOCs. Burgess believes, however, that a rising number of experts in the security community predict that eventually India may seek out an alliance with the United States as a method of deterring Chinese expansion into their backyard as the PRC draw closer to India's neighbors.<sup>96</sup> A promising development in U.S.-Indian relations in a security context would be American defense manufacturing becoming involved in Prime Minister Modi's "Make in India" campaign. One of the ventures to replace India's aging MiG fighter aircraft is the American F-16, which Lockheed Martin is prepared to manufacture for the Indian

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<sup>93</sup> Burgess, "U.S. Pivot to Asia," 373.

<sup>94</sup> Hoyt, "India in the U.S. Naval Strategy," 129.

<sup>95</sup> Burgess, "U.S. Pivot to Asia," 373.

<sup>96</sup> Ibid., 374.

military at plants located within India.<sup>97</sup> This materiel partnership between American contractors and the Indian Ministry of Defense can help strengthen relations that may eventually lead beyond strategic partnership and cooperative security within the region.

### **3. United States as a Maritime Threat**

The United States certainly maintains the fleet capacity and means to pose a grave maritime security threat against India. The USN capability to project power in the Indian Ocean and into the Indian sub-continent paints a very grave picture for India should the two democratic superpowers ever go to war with one another. In addition, while the capability and opportunity are present for the United States to dominate India in the maritime realm, the intent is certainly not there. At face value, the United States does not want to see a major conflict erupt in South Asia that would have any impact on destabilizing the region. Instability in South Asia would have a cascading effect on the global economy and energy security. Increased tensions and conflict with India would surely push them into the strengthening relations with the PRC as a peer competitor of the United States, however unlikely for this to be. Two other considerations should be taken into account when looking at potential hostilities between the United States and India: both nations are democracies and both possess nuclear weapons. The democratic peace theory hold that the two will not go to war as such.<sup>98</sup> In addition to the fact that two are democracies, both countries possess a considerable deterrent in their nuclear weapons, decreasing the chances of even conventional conflict between the United States and India. Overall, the chances of the United States and India going to war, especially in the maritime theater, are incredibly low, especially now with their merging interests as China rivals.

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<sup>97</sup> S. Paul Kapur and Sumit Ganguly, “F-16s, Made in India: Why Second Best Is Best,” *Foreign Affairs*, 14 March 2017, <https://www.foreignaffairs.com/articles/united-states/2017-03-14/f-16s-made-india>.

<sup>98</sup> For more on democratic peace theory, see works by Immanuel Kant, particularly “Perpetual Peace.”

### C. PEOPLE'S REPUBLIC OF CHINA

The PRC is a rising, modernizing naval power in the global arena that is quickly catching up to the combat and power projection capabilities of the United States. The PLAN fleet consists of 672 active warships and support craft manned by approximately 235,000 officers and sailors to include their naval air force, marines and coastal defense forces.<sup>99</sup> The PLAN fleet includes a mix of nuclear and diesel submarines, destroyers, frigates, corvettes, patrol craft, minesweepers and amphibious warfare vessels. As a recently modernizing navy, the PLAN still appears to be technologically behind in most areas compared to the American fleet, regardless of their numbers. There are some advances, however, within the PLAN fleet that shows the potential to catch up to the USN. A prime example of this is seen the Luyang III-class guided missile destroyers sporting components like a vertical launching system (VLS) for surface-to-surface missiles (SSM) and surface-to-air missiles (SAM), a Phalanx-variant close in weapon system (CIWS), as well as the Dragon Eye phased array radar.<sup>100</sup> This platform looks eerily similar to the USN Arleigh Burke-class guided missile destroyers, using similar components and weapons systems. A Department of Defense (DOD) report on Chinese military power solidifies this observation, suggesting “China is rapidly retiring legacy combatants in favor of larger, multi-mission ships equipped with advanced anti-ship, anti-air, and anti-submarine weapons and sensors.”<sup>101</sup> A strategic shift in thinking about their surface fleet suggests the PRC wants to move away from basic coastal and regional defense, pushing for a “blue-water” navy capable of considerably more power projection. Additionally, the acquisition of the Russian-made Kuznetsov-class aircraft carrier and subsequent development of India’s own indigenous carrier suggest a desire for increasing

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<sup>99</sup> “Introduction,” Administration—China, Jane’s IHS Markit, 26 January 2017, <https://janes.ihs.com.libproxy.nps.edu/FightingShips/Display/1352619#Strength of the Fleet>. Because numbers of vessels are kept in operational reserve, the Chinese version of the order of battle tends to show fewer ships than are counted by Western observers.

<sup>100</sup> “Luyang III (Type 052D) class,” Destroyers—China, Jane’s IHS Markit, 05 June 2017, <https://janes.ihs.com.libproxy.nps.edu/FightingShips/Display/1524889>.

<sup>101</sup> Office of the Secretary of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2016*, (Washington, DC: Office of the Secretary of Defense 2016), 25, <https://www.defense.gov/Portals/1/Documents/pubs/2016%20China%20Military%20Power%20Report.pdf>.

power projection.<sup>102</sup> Whether this is to suggest that they wish to strategically compete with the United States in the maritime theater remains to be seen.

The ambitions of the PRC to pursue power projection capability and modernize into a “blue-water” Navy may suggest a desire to push beyond their regional maritime realm into places such as the IOR, requiring considerable auxiliary support to achieve. According to a recent paper from the U.S. Naval War College, China is not yet prepared to undertake this endeavor. Alexandre Sheldon-Duplaix writes, “at this point, the PLAN does not have sufficient support ships to help sustain a permanent combat-ready presence in distant waters, starting with the Indian Ocean and the eastern and western coasts of Africa.”<sup>103</sup> It seems the capacity has not caught up with the doctrine and the PLAN will only be able to support limited expeditionary operations in a CSG structure until they can provide additional auxiliary support. With this in mind, there are those who believe that China’s limited expeditionary capability would suffice in contesting the eastern Indian Ocean. According to John Garver, the PLAN has sufficient capability “to seize the Andaman Islands in the Bay of Bengal as an effort to control the Strait of Malacca chokepoint.”<sup>104</sup>

## **1. Significance of the Indian Ocean to China**

Similar to the United States, China depends on uninterrupted trade flowing through the SLOCs of the Indian Ocean for economic and energy security. According to Sarah Emerson and Vivek Mathur, China acts as a main driver for the flow of oil transiting the Indian Ocean, where between 2000 and 2010, China’s oil imports have increased by 2.4 million barrels per day (bpd).<sup>105</sup> These numbers constitute

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<sup>102</sup> “Kuznetsov (Orel) (Project 1143.5/6) Class,” Aircraft Carriers—China, Jane’s IHS Markit, 26 April 2017, <https://janes.ihs.com.libproxy.nps.edu/FightingShips/Display/1357333>.

<sup>103</sup> Alexandre Sheldon-Duplaix, “China’s Auxiliary Fleet: Supporting a Blue Water Navy in the Far Seas?” *China Maritime Study no. 14 (DRAFT)*, U.S. Naval War College 2017, 178, [https://www.usnwc.edu/getattachment/Research---Gaming/China-Maritime-Studies-Institute/Publications/CMSI-Red-Book-14\\_DRAFT-\(1\).pdf.aspx](https://www.usnwc.edu/getattachment/Research---Gaming/China-Maritime-Studies-Institute/Publications/CMSI-Red-Book-14_DRAFT-(1).pdf.aspx).

<sup>104</sup> John Garver, “Diverging Perceptions of China’s Emergence as an Indian Ocean Power,” *Asia Policy* 22 (July 2016): 58. doi: <https://doi.org/10.1353/asp.2016.0033>.

<sup>105</sup> Sarah Emerson and Vivek Mathur, “The Indian Ocean: Geographic Center of the Global Oil Market,” in *Deep Currents and Rising Tides: The Indian Ocean and International Security*, eds. John Garofano and Andrea Dew (Washington, DC: Georgetown University Press, 2013), 9.

approximately five to six oil tankers transiting from various regions going through the Indian Ocean en route to Chinese ports.<sup>106</sup> The most important fact stemming from this trend is the requirement to transport this oil through the Strait of Malacca in order to consummate delivery, marking Malacca as the most critical chokepoint from a strategic perspective for China. In 2003, China's President, Hu Jintao, introduced the Malacca Dilemma, asserting that closing off the Strait of Malacca would choke off China strategically.<sup>107</sup> In order to mitigate the effects of this potential dilemma, the IOR has seen considerable investment in strengthening relations with littoral Indian Ocean states in order to diversify its options for importing oil to the Chinese mainland. An example of this is through the One-Belt, One-Road (OBOR) initiative, as well as expanding their maritime power into the region in order to secure these investments and trade.<sup>108</sup> Part of the investment plan into the region is considerable investment into the port of Gwadar as part of the China-Pakistan Economic Corridor (CPEC). To this effect, the point of Gwadar is to establish it as a focal point of receiving Persian Gulf Oil and transporting it through pipelines to Xinjiang as an alternative to Malacca that would reduce time, costs, and oversight from the Americans.<sup>109</sup>

Based off the aforementioned points of significance, Niclas Weimar has concluded on five major interests and strategic objectives the PRC have with respect to the Indian Ocean:

Safeguard the security of its seaborne trade, in particular energy imports; access the vast energy and marine resources of...the Indian Ocean and its littoral states; develop alternative trade routes and channels of resource supply largely circumventing the Indian Ocean; enhance its strategic presence and grip on maritime Asia and project its power status through

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<sup>106</sup> Emerson and Mathur, "Indian Ocean," 9.

<sup>107</sup> Shishir Upadhyaya, "Expansion of Chinese Maritime Power in the Indian Ocean: Implications for India," *Defence Studies* 17, no. 1 (2017): 64. doi: 10.1080/14702436.2016.1271720.

<sup>108</sup> Ibid., 64–65.

<sup>109</sup> Qamar Fatima and Asma Jamshed, "The Political and Economic Significance of Indian Ocean: An Analysis," *South Asian Studies* 30, no. 2 (July–December 2015): 79. ProQuest document ID: 1752113115.

naval strength; prevent other regional heavyweights such as India for naval dominance.<sup>110</sup>

The last point really sets the stage for the current state of Sino-Indian relations as China continues to strengthen ties with India's neighbors, especially Pakistan.

## 2. Sino-Indian Relations

The preponderance of Sino-Indian relations, or rivalry depending on the perspective, can be attributed to the 1962 Sino-Indian war. Since then, Jeff Smith points out that the two have struggled for access and influence in each other's backyard and, until recently, this rivalry lacked a maritime component.<sup>111</sup> Jan Hornat's observations on Indian policy toward the Indian Ocean conflicts with Chinese interests in the IOR: "India's growing ambitions to protect its interests in the Indian Ocean, and to play the role of a regional maritime power and security provider."<sup>112</sup> As China wishes to further establish a footprint into the IOR, they undoubtedly provoke an Indian response. Weimar's observation is that a recurring overlapping of interests in the region between these two rising great powers have dramatically increased the potential for a maritime military conflict.<sup>113</sup> The preceding observations can be viewed from a pessimist's point of view, where a naval battle is inevitable between India and China. At the other end of the spectrum, there is hope for a cooperative security arrangement that mirrors what the United States hopes for. Within China, there exists a perspective of hope in strengthening relations with India as President Xi Jinping and Prime Minister Modi have met consistently throughout the past couple years to foster an atmosphere of practical cooperation between the two nations.<sup>114</sup> Additionally, in the military realm, China insists

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<sup>110</sup> Niclas Weimar, "Sino-Indian Power Preponderance in Maritime Asia: A (Re-)source of Conflict in the Indian Ocean and South China Sea," *Global Change, Peace & Security* 25, no. 1 (2013): 15. doi: 10.1080/14781158.2013.761192.

<sup>111</sup> Jeff Smith, *Cold Peace: China-India Rivalry in the Twenty-First Century* (Lanham, MD: Lexington Books, 2014), 143–145.

<sup>112</sup> Jan Hornat, "The Power triangle in the Indian Ocean: China, India, and the United States," *Cambridge Review of International Affairs* 29, no. 2 (2016): 432. doi: 10.1080/09557571.2014.974507.

<sup>113</sup> Weimar, "Sino-Indian Power Preponderance," 6.

<sup>114</sup> Ministry of Foreign Affairs, People's Republic of China, "China's Policies on Asia-Pacific Security Cooperation," January 2017, [http://www.fmprc.gov.cn/mfa\\_eng/zxxx\\_662805/t1429771.shtml](http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1429771.shtml).

that two nations continue to develop a healthy and stable relationship to allow for greater breadth and depth in security cooperation between themselves and India.<sup>115</sup> The problem with this perspective is that it seems very one-sided and from the sole perspective of China while India maintains caution in their endeavor for strategic autonomy.

Gurpreet Khurana argues that “China’s established military presence in the IOR directly impinges on India’s national security by adding the maritime element to India’s military strategy vis-à-vis China.”<sup>116</sup> Chunhao Lou asserts that these two nations lack a degree of mutual political trust based on historical belligerence toward one another on border disputes and the Tibet issue while “India is worried about Chinese entry into the Indian Ocean, suspecting China intends to ‘encircle India.’”<sup>117</sup> James Holmes and Toshi Yoshihara have discussed triggers for Sino-Indian naval competition: forward deployment of PLAN nuclear attack submarines to the Indian Ocean, militarizing China’s “string of pearls” throughout the IOR, and focused effort of Beijing shutting New Delhi out of the South China Sea as a measure of complicating India’s “Look East” policy.<sup>118</sup> The implications for triggering any of these aforementioned redlines by Beijing will undoubtedly initiate a perpetual maritime build up by India and was predetermined a while ago by naval leadership. Former Chief of Naval Staff Arun Prakash said in 2009, “It is time for India to shed her blinkers...and prepare to counter PLA Navy’s impending power-play in the Indian Ocean.”<sup>119</sup> In 2017, it is unclear whether China has or is willing to trip these redlines to preserve Chinese economic or energy security and dive into a maritime conflict with India.

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<sup>115</sup> Ibid.

<sup>116</sup> Gurpreet S. Khurana, “China as an Indian Ocean Power: Trends and Implications,” *Maritime Affairs: Journal of the National Maritime Foundation of India* 12, no. 1 (2016): 21. doi: 10.1080/09733159.2016.1175127.

<sup>117</sup> Chunhao Lou, “U.S.-India-China Relations in the Indian Ocean: A Chinese Perspective,” *Strategic Analysis* 36, no. 4 (2012): 629–630. doi: 10.1080/09700161.2012.689532.

<sup>118</sup> James Holmes and Toshi Yoshihara, “Redlines for Sino-Indian Naval Rivalry,” in *Deep Currents and Rising Tides: The Indian Ocean and International Security*, edited by John Garofano and Andrea Dew (Washington, DC: Georgetown University Press, 2013), 189.

<sup>119</sup> Ibid., 193.

### **3. China as a Maritime Threat**

As was the case with the United States, China certainly possesses the fleet capacity to contest India on the high sea. In the case of Sino-Indian maritime rivalry, however, there is a case of two modernizing naval powers with the economic foundation to dump considerable funding into their navies for a decisive fleet engagement. The crux of the PLAN fleet is their submarine force, which has demonstrated the capacity for deployment into the Indian Ocean to support counter-piracy operations in the Western Indian Ocean.<sup>120</sup> Jeff Smith also comes to this conclusion, stating that in terms of technology, the Chinese and Indian navies are evenly equipped; India maintains the advantage in aircraft carriers while China maintains advantages in undersea warfare.<sup>121</sup> Upadhyaya has shown in his work that “China has been developing for several years, an [anti-ship ballistic missile] known as the DF-21D, a theater range ballistic missile with maneuverable reentry vehicle (MaRV) for targeting ships including aircraft carriers at sea.”<sup>122</sup> While this weapon may be designed with the United States in mind, nothing would stop China from deploying this against the Indian aircraft carriers. A major conflict in the maritime arena between India and China would undoubtedly spill over to the continental theater, prompting another border skirmish between Indian and Chinese land forces. India’s only trump card in this situation would be its reliance on its own strategic nuclear umbrella to deter PRC conventional forces from driving toward New Delhi.

### **D. PAKISTAN**

The Pakistan Navy at face value does not seem as capable as the aforementioned economic powers, but does retain significant conventional and nuclear capability to be employed in the Indian Ocean. According to *Jane's*, the Pakistan fleet consists of approximately one hundred warships and support craft with thirty thousand officers and

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<sup>120</sup> Vishnu Som, “Chinese Submarine, ‘Fighting Pirates’ in Indian Ocean, Shows up in Malaysia,” NDTV, 7 January 2017, <http://www.ndtv.com/world-news/chinese-submarine-fighting-pirates-in-indian-ocean-shows-up-in-malaysia-1646247>.

<sup>121</sup> Smith, *Cold Peace*, 164.

<sup>122</sup> Upadhyaya, “Expansion of Chinese Maritime Power,” 66.

sailors serving among them.<sup>123</sup> Their warships include patrol and midget submarines, destroyers, frigates, patrol craft and minehunters. Perhaps the most significant feature of the Pakistan Navy, as compared to other interregional navies in the IOR, is they have demonstrated the ability to deploy nuclear cruise missiles from under the sea. In January 2017, Pakistan successfully tested its first nuclear-capable submarine-launched cruise missile (SLCM) called the Babur-3 fired from a submerged submarine.<sup>124</sup> This new development and capability for the Pakistan Navy has serious implications on maritime warfare and nuclear deterrence for the region, especially with respect to India. Now, India and Pakistan both possess undersea nuclear capabilities to hedge against one another.

### **1. Significance of the Indian Ocean to Pakistan**

Historically, since the Partition era, Pakistan focus on the Indian Ocean was similar to other great powers as in economic security as well as security within the SLOCs. Prior to 1971, the sea lanes were vital for intrastate shipping between East and West Pakistan. According to Norman Palmer, “this meant almost exclusively protecting these sea lanes from interference by India.”<sup>125</sup> Today, there is less focus with trading in Bengal but rather trading with international partners and importing what Pakistan needs for economic and energy security. Around ninety-five percent of Pakistan’s trade travels via the sea, and with approximately two-thirds of its \$10 billion in oil imports originating from the Persian Gulf, the Indian Ocean is extremely significant to them.<sup>126</sup> Regional ocean transport to satisfy these trading needs does not necessarily warrant anything more than coastal defense and patrol in terms of naval forces, which is what the Pakistan fleet can complement currently. Typically, there are not “blue-water” aspirations for the

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<sup>123</sup> “Introduction,” Administration—Pakistan, Jane’s IHS Markit, 20 March 2017, <https://janes.ihs.com.libproxy.nps.edu/FightingShips/Display/1354016>.

<sup>124</sup> Ankit Panda and Vipin Narang, “Pakistan tests new sub-launched nuclear capable cruise missile. What now?” *Diplomat*, 10 January 2017. <http://thediplomat.com/2017/01/pakistans-tests-new-sub-launched-nuclear-capable-cruise-missile-what-now/>.

<sup>125</sup> Norman Palmer, “South Asia and the Indian Ocean,” in *The Indian Ocean: Its Political, Economic and Military Importance*, eds. Alvin Cottrell and R.M. Burrell (New York: Praeger, 1972), 237.

<sup>126</sup> Moeed Yusuf, “Pakistan’s View of Security in the Indian Ocean,” in *Deep Currents and Rising Tides: The Indian Ocean and International Security*, eds. John Garofano and Andrea Dew (Washington, DC: Georgetown University Press, 2013), 137.

Pakistan Navy as compared to their Indian neighbors. This may change with the development and operation of Gwadar as a deep-water port.

Chinese investment into Gwadar port present a significant strategic security challenge for other great powers as it would solidify their economic footprint in the region and give potential for forward deployed naval forces from the PLAN. Pakistan saw this as a chance to compete strategically and economically with India by seeking this type of foreign investment. Moeed Yusuf believes that “by engaging China directly, Pakistan sought to bring a ready antidote to Indian design in the Indian Ocean, a fact that New Delhi has made explicit frequently in recent years.”<sup>127</sup> The nuclear capabilities notwithstanding, this convergence between China and Pakistan could create a significant external balancing threat for India to face. Nong Hong argues that “though Pakistan’s naval capabilities alone pose no challenge to India, some argue that a combination of Chinese and Pakistani naval forces could indeed be formidable for India to counter.”<sup>128</sup> While at present Gwadar and CPEC are only an economic venture for enhanced trade flow and energy security, mostly for China, there is potential for upsetting the great power balance in South Asia as a result. Yusuf believes that while Pakistan thinks Gwadar and strengthening ties with China will alleviate their security dilemma with India, bringing China deeper into the IOR could complicate balance-of-power politics within the Indian Ocean as well as internationally.

## **2. Pakistan-Indian Relations**

Relations between India and Pakistan are perhaps the most volatile compared to the aforementioned powers in this chapter. Volatility can be traced back to the partition in 1947 and subsequent war over Kashmir. Váli’s observation is that “secular hatred between the Hindu and Muslim communities was inherited by Pakistan and India and raised to the boiling point by the dispute over Kashmir.”<sup>129</sup> What follows is decades of

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<sup>127</sup> Yusuf, “Pakistan’s View of Security,” 145.

<sup>128</sup> Nong Hong, “Charting a Maritime Security Cooperation Mechanism in the Indian Ocean: Sharing Responsibilities among Littoral States and User States,” *Strategic Analysis* 36, no. 3 (2012): 402. doi: 10.1080/09700161.2012.670539.

<sup>129</sup> Váli, *Indian Ocean Region*, 96.

tension and conflict culminating in at least two more wars and border conflicts with a final result of strained nuclear deterrence toward one another. Some scholars are optimistic, however, for cooperative, even peaceful, relations between these two neighbors. Sajjad Ashraf, for example, believes there is enough commonalities between India and Pakistan for the possibility of cordial relations and future cooperation, arguing that the negative aspects of their relations are “‘trapped in history...,’ marked by conflict, mistrust, and violence.”<sup>130</sup> Threats toward Indian and Pakistani national security, specifically in the maritime realm, are perhaps the best chance for cooperative relations between these two nations. Piracy and terrorism, which will be touched on shortly, have the capacity to threaten trade interests in the Western Indian Ocean. A maritime coalition between India and Pakistan to secure the sea lanes between Eastern Africa, the Persian Gulf and the greater Indian Ocean would be the best step to take in stabilizing relations, as it would enhance both nations’ economic and energy security, as well as further legitimize their stance in the international realm.

### **3. Pakistan as a Maritime Threat**

While not as conventionally superior in numbers or technologically compared to the Indian Navy, the Pakistan Navy certainly has the resolve to wage maritime combat with their neighbors if the need arises. Similar to the case with the PLAN, Pakistan’s undersea warfare elements will be India’s greatest challenge, as these have the capability to approach by stealth and destroy critical targets, such as Indian aircraft carriers. Pakistan’s sea-based nuclear armaments will present a significant challenge as well, since the SLCMs can be used against not only Indian naval forces but also ground elements as well. The issue behind this observation is it operates under the assumption that total war will erupt between the two nations. While nuclear deterrence theory may be sufficient to prevent open conflict from emerging between India, China, and the United States, the same cannot be said with confidence for Pakistan. As demonstrated during the Kargil War, these two states went to war after acquiring nuclear weapons capability. India and Pakistan are the only two nuclear-armed states to go to war with each other to date,

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<sup>130</sup> Sajjad Ashraf, “India-Pakistan Relations: Common Ground and Points of Discord,” *Emirates Lecture Series* 88 (2011): 1. ProQuest document ID: 1527294407.

placing a strain on a “nuclear peace theory.” As it stands, Pakistan’s navy is a credible threat toward India.

#### E. NON-STATE ACTORS

Mentioned briefly throughout the chapter, the presence of piracy and maritime terrorism, most notably off the coast of East Africa, presents a credible threat to economic and energy security given the amount trade transiting from the Persian Gulf, the Red Sea, the Indian Ocean and coming from near the Cape of Good Hope. Many consider 2008 as the watershed year for piracy in the Indian Ocean, where at least twenty vessels were hijacked off the coast of Somalia, placing the issue into the light of the international community.<sup>131</sup> John Martin argues that there exists an increasing trend of piracy within the IOR, where attacks doubled following the successful hijacks in 2008.<sup>132</sup> With the implications for interrupting the flow of trade goods and oil in the Indian Ocean, many nations banded together to combat this emerging threat. Three combined task forces (CTF-150, -151, and -152) were stood up as counterpiracy units consisting of naval forces from several European and Asian nations, including the United States. The Chief of Naval Staff for India, then Admiral Sureesh Mehta, has advocated for these CTFs in enhancing maritime security within the IOR: “Globalization imperatives have given impetus for concentrated and cooperative effort of maritime forces in securing the maritime highways.”<sup>133</sup> This was further emphasized in the United States maritime strategy *CS21*, acknowledging the fact that no single nation has the resources required to solely provide security throughout the entirety of the maritime domain and requires partnerships across international institutions to be successful.<sup>134</sup> This is where ideas of cooperative security against threats of piracy will become critical for strengthening bilateral relations for India.

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<sup>131</sup> John Martin, “Maritime Piracy in the Indian Ocean,” in *Deep Currents and Rising Tides: The Indian Ocean and International Security*, eds. John Garofano and Andrea Dew (Washington, DC: Georgetown University Press, 2013), 21.

<sup>132</sup> Ibid., 30.

<sup>133</sup> Russell, “The Indian Ocean,” 197.

<sup>134</sup> Ibid., 198.

## **F. CONCLUSION**

The Indian Ocean is an important geographic space, not only for India but for most nations that depend on uninterrupted trade and energy resources. India finds its immediate periphery encroached upon by extra-regional great powers, belligerent neighbors, and volatile non-state actors bent on destabilizing the flow of trade along the sea lanes. It is prudent that India develop a more robust maritime strategy that focuses on addressing these issues and modernizing their navy to combat the various threats to Indian national and economic security. By far, however, is the rise of China, the modernization and expansion of their navy, and their ever-increasing economic and military footprint in the IOR that seems to be the most credible threat for India. A rising China is perhaps the biggest explanation, combined with elements from the rest of this chapter, for India's renewed focus on the sea.

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### **III. THE INDIAN NAVY—CAPABILITIES AND DOCTRINE**

With the stage set in the IOR for the various players for India to contend with, it is time to shift focus to India’s navy itself. Once considered to be a “Cinderella service,” as it was often neglected and set aside with India’s focus on its land borders, the Indian Navy finds itself a key player in the century of maritime focus. The purpose of this chapter is to provide information on the Indian Navy’s historical background and current capabilities it can bring to bear to in the twenty-first century. Additionally, this chapter will look at India’s current maritime strategy in detail to understand the factors that help shape it better.

#### **A. HISTORICAL BACKGROUND**

The Indian Navy obviously finds its historical and institutional foundations in the Royal Navy during the period of colonialization. The Royal Indian Navy was the maritime component of the Armed Forces of the British Raj, which eventually split into the Indian and Pakistani navies following the partition in 1947. While India was an independent nation with the fleeing of British colonialism from South Asia, the Navy still relied on support from the Royal Navy. Chris Madsen wrote that “the British never actually left, but stayed sometime after independence.”<sup>135</sup> Madsen refers to the number of officers who volunteered to stay behind in an effort to train and man the fledgling Indian and Pakistani navies. According to Madsen, the naval and professional experience of the British officers who remained was beneficial to India in developing maritime capability rather than creating a vacuum of expertise.<sup>136</sup> The special circumstances of partition afforded India precious naval materiel and experience that most young, developing nations would not have access to. The result was a formidable maritime force that could protect India’s coastline and trade interests, giving leadership the chance to focus on their borders with Pakistan.

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<sup>135</sup> Chris Madsen, “The Long Goodbye: British Agency in the Creation of Navies for India and Pakistan,” *The Journal of Imperial and Commonwealth History* 43, no. 3 (2015): 464. doi: 10.1080/03086534.2014.983348.

<sup>136</sup> Ibid., 464.

The partition of the British Raj into India and Pakistan not only divided up borders and populations, but their militaries as well. The specific division of the Royal Indian Navy, in particular, provides some insight into why the Indian and Pakistani navies are the way they are today. The twenty-first century navies of India show a robust, blue-water force with a focus on power-projection and sea control. Pakistan, on the other hand, shows a more flexible, littoral force capable of regional area denial and strategic deterrence. According to Madsen, during the process of partition, Commodore James Jefford, a senior Royal Indian Navy officer, led a subcommittee of British, Hindu and Muslim officers charged with dividing up naval materiel among the two counties.<sup>137</sup> Madsen writes:

Once negotiators decided on a proportion of two to one, allocation of ships between the new navies was relatively easy. As the bigger country, India received four sloops, two frigates, 12 fleet minesweepers, one corvette, one survey ship, four armed trawlers, four motor minesweepers, one motor launch, four harbour defence boats and all landing craft; Pakistan in turn gained two sloops, two frigates, four fleet minesweepers, two armed trawlers, two motor minesweepers and four harbour defence boats.<sup>138</sup>

Naturally, the country with the larger population received more naval materiel with which to expand off of. Additionally, Madsen argues that the major plans for expansion of the two navies following partition showed a “fleet of aircraft carriers and cruisers for India and squadron of cruisers and fleet destroyers for Pakistan.”<sup>139</sup> Finally, Madsen showed that, in addition to ships and sailors, shore establishments were also divided between the two countries with respect to the established borders of partition. These naval bases were distributed based on geography: the main base and dockyard facilities at Bombay would go to India, along with several subsidiary bases along the coasts, while the training academy and technical schools within Karachi went to Pakistan.<sup>140</sup> These divisions shed some light into the natural progression of the Indian Navy into the aspiring blue-water force the world sees today.

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<sup>137</sup> Madsen, “The Long Goodbye,” 470.

<sup>138</sup> Ibid.

<sup>139</sup> Ibid., 464.

<sup>140</sup> Ibid., 470.

## B. INDIAN NAVAL CAPABILITIES

According to Jane's, the Indian navy consists of 113 aircraft carriers, submarines and surface ships with approximately 67,800 officers and sailors complimenting them.<sup>141</sup> These numbers, taking into consideration the sheer tonnage, puts the Indian Navy within the top ten navies of the world. With these numbers and the trend in modernization seen, it would not be too presumptuous to suggest that the Indian Navy has the potential to contend, if just regionally, with navies from Russia, China, and the United States. In fact, according to Kyle Mizokami, the Indian Navy has the potential for modernization to surpass the Russia Navy in terms of naval strength by 2030.<sup>142</sup> The chapter now looks at India's naval capabilities broken down between aircraft carriers and aviation warfare, submarines, and surface combatants.

### 1. Aircraft Carriers

The INS Vikramaditya, formerly the Kiev-class Admiral Gorshkov, was commissioned in 2013 and has operated and deployed aircraft since 2014.<sup>143</sup> This is not the first time India has purchased an aircraft carrier to be counted in its operational inventory. In March 2017, the INS Viraat was decommissioned after thirty years of service, serving as one of India's maritime power-projection capabilities; the *Viraat* was transferred to the Indian Navy from the Royal Navy after serving as the HMS *Hermes* since 1959.<sup>144</sup> At 44,500-tons, the Vikramaditya is roughly twice the size of the *Viraat*, allowing to embark considerably more aircraft for maritime power-projection. In addition to acquiring the Vikramaditya, "the deal included 12 MiG-29K aircraft, four dual-use MiG-29KUB trainers (since increased to 36 MiG-29K and nine MiG-29KUB aircraft), and six helicopters (Kamov Ka-28 and Kamov Ka-31 variants). The carrier's air wing is

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<sup>141</sup> "Executive Summary: India," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Executive summary>.

<sup>142</sup> Kyle Mizokami, "The 5 Most Powerful Navies of 2030," *National Interest*, 25 June 2016, <http://nationalinterest.org/feature/the-5-most-powerful-navies-2030-16723?page=2>.

<sup>143</sup> "Aircraft Carrier," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Aircraft carrier>.

<sup>144</sup> Sam Lagrone, "World's Oldest Aircraft Carrier INS Viraat Decommissioned; Could Be Scrapped or Sunk after Hotel Deal Stalls," *USNI News*, 6 March 2017, <https://news.usni.org/2017/03/06/worlds-oldest-aircraft-carrier-ins-viraat-decommissions>.

intended to eventually comprise 16 MiG-29Ks, including four twin-seat KUB trainer variants, alongside six airborne early warning and control (AEW&C) Ka-31 and Ka-28 ASW helicopters.”<sup>145</sup> The additional aircraft provided in the deal gives India considerably more lethality in terms of carrier aviation than before.

As 4+++ generation fighters, the MiG-29Ks possess considerable anti-ship and anti-air weaponry in the form of the AS-17 Krypton and the AA-11 Archer to be able to contend with fifth- and even sixth-generation fighter craft, as well current-generation surface ships.<sup>146</sup> Additionally, the deal with the Russian included the MiG-29KUB, which is a carrier-variant two-seat design to operate as a training platform for trainee pilots in arresting aircraft at sea.<sup>147</sup> In addition to the MiG-29K fighter variants, the Indian Navy and Air Force attempted to design an indigenous variant of the MiG-29K, the Tejas. According to *The Times of India*, the current dilemma is that Tejas “does not meet the ‘thrust-to-weight requirement to take off with a full fuel and arms load’ from an aircraft carrier’s deck.”<sup>148</sup> While the *Tejas* can operate as a viable platform for the Indian Air Force, aerospace engineers will have to look critically at its design in order to produce an indigenous variant suitable for carrier-based combat operations.

The Ka-28 Helix is the export variant of the Russian Ka-27 anti-submarine combat helicopter that can operate aboard aircraft carriers and surface ships in a multi-mission capacity.<sup>149</sup> In addition to an active dipping sonar, the Helix possess a ventral weapons bay capable of deploying the AT-1MV torpedo or APR-2 ASW rocket, bombs or depth charges, and sonobuoys.<sup>150</sup> This makes the Helix comparable in operation to the

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<sup>145</sup> “Aircraft Carrier,” World Navies—India, Jane’s IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Aircraft carrier>.

<sup>146</sup> “MiG-29,” Jane’s Aircraft Upgrades, Jane’s IHS Markit, 10 February 2017, [https://janes.ihs.com/Janes/DisplayFile/JAU\\_9123](https://janes.ihs.com/Janes/DisplayFile/JAU_9123).

<sup>147</sup> Ibid.

<sup>148</sup> “Navy Rejects Tejas, Says ‘Overweight’ Fighter Does Not Meet Its Requirements,” *Times of India*, 2 December 2016, <http://timesofindia.indiatimes.com/india/Navy-rejects-Tejas-says-overweight-fighter-does-not-meet-its-requirements/articleshow/55756350.cms>.

<sup>149</sup> “Kamov Ka-27, Ka-28,” Jane’s Aircraft Upgrades, Jane’s IHS Markit, 10 February 2017, <https://janes.ihs.com/Janes/Display/1337847>.

<sup>150</sup> “Kamov Ka-27, Ka-28,” Jane’s Aircraft Upgrades, Jane’s IHS Markit, 10 February 2017, <https://janes.ihs.com/Janes/Display/1337847>.

USN's SH-60 Seahawk ASW variants in scope and mission-set. What the Helix can deliver for the Indian Navy, whether deployed from aircraft carriers or surface combatants, is a considerable ASW capability against submarines in the IOR. The undersea warfare challenges posed by the PLA Navy in the previous chapter can at least be mitigated by Indian Helix aircraft.

India has made strides in modernizing their land-based maritime patrol and ASW capability. In 2009, India had awarded Boeing the contract to begin phasing out their Tu-142M Bear F/J MPA with the new P-8I Poseidon.<sup>151</sup> The Poseidon will greatly add to India's ASW capability as they will be fitted with the APY-10 radar to include inverse synthetic aperture radar (ISAR) capability to optimize periscope detection and surface ship identification.<sup>152</sup> In addition to its increased detection capabilities, the P-8I can be equipped with AGM-84 Harpoon anti-ship cruise missile and Mk-54 lightweight torpedo.<sup>153</sup> Not only will these MPRA have considerable ASW capability to augment surface ships and ASW helicopters, they possess stand-off anti-ship capability. This will allow for multi-axis attack capability through coordination between P-8Is, carrier-based attack aircraft, and surface combatants. All of these factors improve the Indian Navy's power-projection capacities considerably. While they are not expected to be delivered until 2020, the prospect of acquiring the P-8I through American-based defense distributors allows for deeper U.S.-Indian cooperation in the future.

Finally, the Indian Navy's first indigenously designed and constructed aircraft carrier is the INS Vikrant; at 44,000 tons, she possesses a short take-off but arrested recovery (STOBAR) system and is capable of launching two aircraft simultaneously with dual runways off a ski-jump ramp.<sup>154</sup> While not very different from the Vikramaditya, the "Vikrant will be capable of operating an aircraft mix of the Russian MiG-29K and [navy] Light Combat Aircraft (LCA Tejas) fighters being developed indigenously by

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<sup>151</sup> "P-8I Maritime Patrol Aircraft," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#P-8I maritime patrol aircraft>.

<sup>152</sup> Ibid.

<sup>153</sup> Ibid.

<sup>154</sup> "Indigenous Aircraft Carrier," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Indigenous aircraft carrier>.

Hindustan Aeronautics Ltd (HAL).<sup>155</sup> This suggests that while India will continue to provide a market for Russian aircraft manufacturers, they remain diligent in pursuing indigenous manufacturing capabilities for their combat aircraft. Additionally, the same can be said for their ASW helicopters as India is pursuing a means to produce a Helix variant indigenously to provide a self-sufficient compliment for carriers and surface combatants.<sup>156</sup> While not yet commissioned for full active service, the Vikrant shows the potential for a viable power-projection platform to serve the Indian Navy's needs in the IOR and beyond.

Those who are still hopeful for future U.S.-Indian military cooperation, especially in the maritime arena, can find a degree of optimism in India's second ingenious aircraft carrier. Officially designated as IAC-II, the likely named INS Vishal is designed to be constructed in southern India with similar capabilities and functionality as the Vikrant, however it sits roughly 20,000 tons larger.<sup>157</sup> According to a report in Jane's, the Indian Navy has looked into fitting the Vishal with an electromagnetic aircraft launch system (EMALS) that is used in the construction of the USN's Gerald R. Ford-class carriers.<sup>158</sup> The Joint Working Group on Aircraft Technology Cooperation (JWGACTC) between India and the U.S. met in 2016 to explore the possibilities of fitting Vishal with EMALS and other advanced recovery technology shared from the Ford-class aircraft carriers.<sup>159</sup> Should these ventures follow-through to the completion and launch of an indigenously built aircraft carrier sharing advanced technology, it would absolutely place India in an advantage on power projection within the IOR. Additionally, the benefits of the military cooperation with the U.S. add as a considerable external balancer for India against China. With the second carrier still a decade away, it will be a while for the benefits of these ventures to come to fruition.

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<sup>155</sup> "Indigenous Aircraft Carrier," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Indigenous aircraft carrier>.

<sup>156</sup> Ibid.

<sup>157</sup> Ibid.

<sup>158</sup> Ibid.

<sup>159</sup> Ibid.

## 2. Submarines

As alluded to in previous chapters, the Indian Navy's undersea warfare capabilities may be the most limited within the spectrum of maritime warfare. Similar to the PLA Navy, the Indian Navy's submarine service is a mixed bag of diesel- and nuclear-powered submarines; until recently, the Indian Navy relied on exports in order to fill its submarine capacity. The Sindhughosh-class vessels are export variants of the Russian Kilo-class diesel-powered submarines, commissioned as early as the 1980s and serve as the workhorse of the workhouse of the undersea fleet.<sup>160</sup> The Sindhughosh, like other Kilo variants, are retro-fitted with the SS-N-27 Sizzler anti-ship missiles to enable them as primary subsurface combatants in the undersea warfare spectrum.<sup>161</sup> Additionally, they are also fitted with the SS-N-30 land attack missiles to augment fleet power-projection capabilities.<sup>162</sup> Unfortunately, unreliability of the class relating to particular crew-safety issues severely delayed procurement and integration into the fleet. According to Jane's, the INS Sindhurakshak suffered an explosion after returning to port stemming from a torpedo arming malfunction or a hydrogen leak from the battery cells, calling the serviceability of the class into scrutiny.<sup>163</sup> While the Sindhughosh-class can bring credible power-projection and area-denial capabilities to bear, the scrutiny of the safety of the class present a possible issue for naval leadership in procuring and deploying them.

The Indian Navy also employs four German-made Type 209 diesel-electric submarines as part of its inventory. While comparable to the Sindhughosh diesels, the Shishumar-class Type 209s do not possess as considerable attack capabilities against surface ships, but does employ AEG SUT 266 (Mod 1) wire guided active and passive

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<sup>160</sup> "Sindhughosh (Kilo) Class," World Navies—India, Jane's IHS Markit, 21 July 2017, [https://janes.ihs.com/WorldNavies/Display/1322696#Sindhughosh \(Kilo\) class](https://janes.ihs.com/WorldNavies/Display/1322696#Sindhughosh (Kilo) class).

<sup>161</sup> Ibid.

<sup>162</sup> Ibid. Also, see SS-N-30A (Kalibr) report from Center for Strategic and International Studies. <https://missilethreat.csis.org/missile/ss-n-30a/>.

<sup>163</sup> Ibid.

homing torpedoes for undersea warfare.<sup>164</sup> This still provides naval leadership additional assets and options for undersea patrols and area-denial capability best employed at chokepoints. Additionally, to augment the Shishumar-class, as well as the rest of the diesel-electric submarine fleet, the Indian Navy has made a deal to purchase and procure French-made Scorpene-class boats. The Scorpene-variant Kalvari-class boats will employ the Exocet SM39 Block II anti-ship missiles as an option to deploy against surface ships, again augmenting the Navy's power-projection capabilities.<sup>165</sup> India expects the first two deliveries of the Kalvari-class toward the end of 2017.<sup>166</sup> As with their carriers and maritime aircraft, the Indian Navy has taken steps to begin developing their indigenously built diesel-electric submarine. India's next-generation submarine, Project 75I, would incorporate air-independent propulsion (AIP) to allow for considerable flexibility in undersea operations compared to conventional diesel-electric boats.<sup>167</sup>

India is currently leasing one Russian Akula-class nuclear-attack submarine to augment its undersea fleet. The INS Chakra is operating under a ten-year lease from Russia and is the testing and training platform for India's upcoming indigenous nuclear-powered submarine class and its crews.<sup>168</sup> Similar to the Kilo-variants sold to India, the Chakra comes equipped with SS-N-27 Sizzler anti-ship missile launchers and torpedo tubes to provide for more distributed anti-surface and anti-submarine capability.<sup>169</sup> While leasing of additional nuclear-powered attack submarines from Russia remains to be seen, the Chakra adds credibility to India' naval combat power and prepares sailors for operating the new nuclear boat coming online in the near future.

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<sup>164</sup> "Shishumar (Type 209/1500) Class," Jane's Fighting Ships, Jane's IHS Markit, 21 February 2017, <https://janes.ihs.com/Janes/Display/1353288>.

<sup>165</sup> "Kalvari (Scorpene) Class," Jane's Fighting Ships, Jane's IHS Markit, 29 June 2017, <https://janes.ihs.com/Janes/Display/1356551>.

<sup>166</sup> "Scorpene Class," World Navies – India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Scorpene class>.

<sup>167</sup> "Next-Generation Submarine, Project 75I," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Next-generation submarine, Project 75I>.

<sup>168</sup> "Akula Class," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Akula class>.

<sup>169</sup> "Akula (Schuka-B) Class," Jane's Fighting Ships, Jane's IHS Markit, 12 March 2017, <https://janes.ihs.com/Janes/Display/1357625>.

The INS Arihant is the first in its class of indigenously built nuclear-powered ballistic missile submarines. Originally chartered as the Advanced Technology Vessel, the Arihant-class is designed to carry the K-15 Sagarika nuclear SLBM as part of India's nuclear triad.<sup>170</sup> This presents a major step forward in strategic distribution among India's military services as they did not possess a sea-based deterrence capability until now. Additionally, it is confirmed that further development into the K-4 SLBM, possessing nearly five times the range of the K-15, was successfully test-fired from the Arihant in early 2017.<sup>171</sup> Pakistan's aforementioned Babur-3 SLCM may be a response to India's new *platform*. Arihant is *one* of three confirmed boats to be produced, with the other two hulls complete; however, it is unclear to determine when they will become operational in the coming years.<sup>172</sup> Nevertheless, India's undersea warfare capabilities continue to improve and modernize at an alarming rate.

### **3. Surface Combatants**

Across the entire spectrum of maritime warfare, you can see a push for modernization of platforms and weapons systems to stay competitive with extra-regional powers. This modernization is seen the most among the Indian Navy's surface combatants. To begin, there are two modernized variants of destroyer procured by India. The Project 15A Kolkata-class Destroyer was designed to become an improvement of the Project 15 Delhi-class destroyers that operated throughout the 1990s and into the beginning of the twenty-first century, sourcing approximately sixty percent of its materiel indigenously.<sup>173</sup> What is interesting about the Kolkata-class, as with other modernizing navies in the twenty-first century, is how similar their design and component functionality is to the U.S. Arleigh Burke destroyers. The Kolkata-class is fitted with an amalgam of air, surface, fire control and navigational radars; most notably is the EL/M-

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<sup>170</sup> “Nuclear-powered Ballistic Missile Submarine,” World Navies—India, Jane’s IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Nuclear-powered ballistic missile submarine>.

<sup>171</sup> Ibid.

<sup>172</sup> Ibid.

<sup>173</sup> “Surface Combatants,” World Navies—India, Jane’s IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Surface combatants>.

2248 STAR phased-array surface search radar.<sup>174</sup> Based off the details provided by Jane's on this Israeli-made radar system, it seems to be comparable in functionality to the SPY-1 radar series employed on the Arleigh Burke- and Ticonderoga-class ships and even the Dragon Eye variant employed by the PLA Navy.<sup>175</sup> The similarities do not end solely with the radar systems or the hull design, however. The Kolkata-class is also fitted with a vertical launching system to deliver their SAMs, specifically the Barak-LR and Barak-8 interceptors for anti-air and anti-missile defense.<sup>176</sup> Additionally, the Indian Navy has employed a considerable anti-ship missile aboard this class of ships, the BrahMos cruise missile, capable of achieving supersonic speeds over 150 nautical miles.<sup>177</sup> The Kolkata-class is a big step in modernizing the Indian Navy to provide distributed lethality across its platforms.

One of the new frigate classes, the Project 17 Shivalik-class, demonstrates the flexibility in Indian warship design to be able to operate between the littoral and blue-water environments to support operations. According to Jane's, the Shivalik's armaments include "Barak air defence missiles, eight vertically launched Klub cruise missiles, and 24 9M317 Shtil-1 (SA-N-7B) medium-range air defence missiles."<sup>178</sup> In addition to the conventional loadouts, the frigate comes equipped with torpedo launchers, hull mounted sonar systems, and a towed sonar array to support ASW missions.<sup>179</sup> The focus on stealth designing and the ASW mission for these frigates suggests India's critical look into the ASW problem. As alluded to in the previous chapter, the PLAN will be at an advantage in undersea warfare, where platforms like the Shivalik will certainly assist in mitigating the problem.

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<sup>174</sup> "Kolkata (Project 15A/B) Class," Jane's Fighting Ships, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/Janes/Display/1357081>.

<sup>175</sup> "ELM-2248 (MF-STAR)," C4ISR & Mission Systems: Maritime, Jane's IHS Markit, 6 June 2017, <https://janes.ihs.com/Janes/Display/1512328>.

<sup>176</sup> "Kolkata (Project 15A/B) Class," Jane's Fighting Ships, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/Janes/Display/1357081>.

<sup>177</sup> Ibid.

<sup>178</sup> "Surface Combatants," World Navies—India, Jane's IHS Markit, 21 July 2017, <https://janes.ihs.com/WorldNavies/Display/1322696#Surface combatants>.

<sup>179</sup> "Shivalik (Project 17) Class," Jane's Fighting Ships, Jane's IHS Markit, 12 March 2017, <https://janes.ihs.com/Janes/Display/1356686>.

Finally, the Kamorta-class ASW corvette is roughly half the size of the Shivalik and designed to operate more so in the littoral environments. Equipped with vertical launched Barak missiles, conventional gun systems, and torpedoes, the Kamorta seems to be more tailored to fighting patrol craft and midget submarines close into the shoreline.<sup>180</sup> Pakistan comes to mind when regarding this platform, as their warships and submarines would operate closer to the littoral in the Arabian Sea that could threaten Indian trading interests. Additionally, this platform would be a viable option in deterring piracy close to Indian territorial waters, but does not seem efficient enough to go beyond that due to range constraints on the platform and weapons systems.

### C. MARITIME STRATEGY

The aforementioned document on Indian Maritime Security Strategy, *Ensuring Secure Seas*, is the driving element putting all of these platforms and aspects together in order to ensure maritime security in the IOR for India. Walter Ladwig argued that Indian Naval Expansion, thus shaping the maritime strategy existing today, involves three things: prevent intrusion from hostile powers, project power based off India's interests, protection of the SLOCs.<sup>181</sup> Additionally, Ladwig considered Admiral Mehta's goal for the Navy was to be “capable of influencing the outcome of land battles and performing a constabulary role in the Indian Ocean region” by 2020.<sup>182</sup> What Ladwig and Admiral Mehta is suggesting is Navy designed and operated with a focus on power projection and sea control. The design of the platforms already mentioned are line with this focus along with what is seen in *Ensuring Secure Seas*.

#### 1. India's Maritime Interests

The Indian Navy has listed its areas of immediate maritime focus into two: primary and secondary. The primary areas of maritime interests involve India's immediate coastal regions, the Arabian Sea, the Bay of Bengal, the Andaman Sea, the

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<sup>180</sup> “Kamorta Class (Project 28),” Jane’s Fighting Ships, Jane’s IHS Markit, 12 March 2017, <https://janes.ihs.com/Janes/Display/1357191>.

<sup>181</sup> Walter Ladwig, “Drivers of Indian Naval Expansion,” in *The Rise of the Indian Navy: Internal Vulnerabilities, External Challenges*, ed. Harsh V. Pant (Burlington, VT: Ashgate, 2012), 25.

<sup>182</sup> Ibid., 31.

Persian Gulf, the Gulfs of Oman and Aden, the Red Sea, critical chokepoints to include Hormuz and Malacca, and the related littorals.<sup>183</sup> These areas make sense as they involve deterring imminent threat of invasion into Indian territory and protection of shipping areas that contain vital resources for India to import, which shall be covered in the next chapter. The secondary areas of focus demonstrate part of the reasoning for India's push toward modernization, power projection, and expansion in the maritime arena. The Indian Navy includes the following as secondary areas of interest: the Southeast Indian Ocean, the South and East China Seas, the Western Pacific Ocean, the Mediterranean Sea, the West Coast of Africa, Antarctica, and the relating littorals.<sup>184</sup> These secondary areas require the assumption that India has national and strategic interests in these locations, requiring some sort of naval presence to protect these areas.

The Indian Navy understands there will a “steady increase in the Indian Navy’s operational footprint across India’s areas of maritime interest, with a growing cooperative framework and contributions as a ‘net security provider’ in the maritime neighborhood.”<sup>185</sup> The phrase ‘net security provider’ is what stands out the most in India’s maritime strategy. This suggests that India is prepared to take on the role of guarantor for maritime security in the IOR, a role that has since transferred from the United Kingdom following partition to the United States. Today, the development of India’s modernized naval force demonstrates a transition into to the role of net security provider. Gurpreet Khurana explores this in his critical examination of *Ensuring Secure Seas*, suggesting the shift in mindset serves as India’s formal proclamation of the IORs security guarantor.<sup>186</sup> While various platforms come into play, does the doctrine imbedded in India’s maritime strategy support the role of net security provider?

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<sup>183</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

<sup>184</sup> Ibid.

<sup>185</sup> Ibid.

<sup>186</sup> Gurpreet Khurana, “India’s Maritime Strategy: Context and Subtext,” *Maritime Affairs: Journal of the National Maritime Foundation of India* 13, no. 1 (2017): 16. doi: 10.1080/09733159.2017.1309747.

## **2. Power Projection and Sea Control**

In order to effectively provide security in the maritime realm of the IOR, the Indian Navy will need to rely on a doctrine of power projection and sea control, similar to what the United States Navy has employed since World War II. To this effect, *Ensuring Secure Seas* has mandated that the “Indian Navy will project combat force in and from the maritime domain, and undertake offensive action for national defence.”<sup>187</sup> This projection of combat force will involve a consolidated effort across the spectrum of maritime warfare to include anti-surface, anti-submarine and anti-air warfare demonstrated from all platforms in the navy’s inventory.<sup>188</sup> A simple way of looking at these ideas is to assume that India will rely on sea control and denial within their aforementioned primary areas of interest and power projection for their secondary areas of interest. The continued focus on aircraft carrier materiel and doctrinal development will prove critical in power projection while the renewed focus on submarines will play a critical role in sea control and denial. The result of this is the Indian Navy mirroring, at least doctrinally, the United States Navy.

*Ensuring Secure Seas* demonstrates India’s aspiration for fleet structure similar to the United States:

A balanced, multi-dimensional fleet is necessary for obtaining sea control beyond coastal waters. The Carrier Task Force (CTF), consisting of Carrier Battlegroup(s) (CBG) with integral Anti-Air Warfare (AAW), Anti-Surface Warfare (ASuW) and Anti-Submarine Warfare (ASW) capability, Surface Action Groups (SAG), and Underway Replenishment Groups (URG), supported by land-based aircraft, will be deployed for establishing the required sea control. Maritime strike, using long range missiles fired from ships, shore and aircraft, and the use of mines in selected choke points for the enemy, are also proven means of sea denial.<sup>189</sup>

The Indian Navy’s aspirations for power projection and sea control are similar in maritime doctrine to the United States, whose proven combat operations at sea can attest to success of said doctrine. Rajat Ganguly that, historically, American power projection

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<sup>187</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

<sup>188</sup> Ibid.

<sup>189</sup>Ibid.

has influenced the evolution of Indian maritime doctrine, specifically the presence of the Enterprise strike group in the Indian Ocean during the Bangladesh crisis.<sup>190</sup> A mirroring of these maritime warfare concepts can allow for greater cooperation between the Indian Navy and other maritime nations, especially the United States.

*Ensuring Secure Seas* holds the potential of training with other navies in incredibly high regard. The Indian Navy has regularly conducted exercises with foreign nations' navies in the past and sees them as opportunities to demonstrate capability, sharpen skills, and learn best practices from their foreign counterparts.<sup>191</sup> To date, the Indian Navy has participated bi-laterally and multi-laterally in naval exercises with the United States, Oman, the United Kingdom, Sri Lanka, Brazil, South Africa, Singapore, Japan, France, Australia, Russia and Indonesia.<sup>192</sup> This demonstrates India's pursuit to narrow their focus on strike group doctrine through interoperability. Additionally, Khurana's analysis of *Ensuring Secure Seas* demonstrates a capacity for India to seek maritime cooperation with China in the form of these exercises rather than competition and rivalry.<sup>193</sup> Khurana believes the China factor in India's maritime strategy to and the press for seeking cooperation gives insight for reasoning behind the lack of negativity toward China within the strategy.<sup>194</sup> From the perspective of maritime strategy, *Ensuring Secure Seas* does not see China necessarily as a threat to India's interests, but as partner in maritime security cooperation.

### **3. Self-Reliance and Self-Sufficiency**

In the previous section of this chapter concerning naval platforms and capabilities, there was considerable emphasis on indigenization in production and procurement. *Ensuring Secure Seas* devotes an entire section toward indigenization of the Navy, demonstrating India's maritime force transitioning from a "buyer's navy" into a

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<sup>190</sup> Rajat Ganguly, "India's Military: Evolution, Modernization and Transformation," *India Quarterly* 71, no. 3 (2015): 193. doi: 10.1177/0974928415584021.

<sup>191</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

<sup>192</sup> Ibid.

<sup>193</sup> Khurana, "India's Maritime Strategy," 22.

<sup>194</sup> Ibid.

“builder’s navy.”<sup>195</sup> Khurana attributes this as an appeal toward Prime Minister Modi’s “Make in India” program as part of India’s national strategy, which will be covered in detail in Chapter IV.<sup>196</sup> While transforming into a “builder’s navy,” may be good in the long run for attaining the self-reliance and self-sufficiency that India is striving for, there may be an issue of doing too many all at once. *Ensuring Secure Seas* briefly lays out a plan for their modernization and indigenization to develop their aircraft carriers, destroyers, frigates, corvettes, submarines, patrol craft, and combat aircraft. According to Jane’s reports, however, there are considerable delay gaps between anticipated delivery dates and actual commissioning dates, the Vikrant commissioning after a four-year delay, for example.<sup>197</sup> This could suggest that India’s maritime production capabilities were not prepared for a complete transition to indigenously developing their naval platforms. It may not be so much as conceptual issue, but rather the maritime industrial and shipbuilding sector requires time to catch up to the Indian Navy’s lofty orders.

To the effect of self-reliance, there is also mention of enhancing the navy’s reach and sustainability for power projection and sea control. *Ensuring Secure Seas* states that “in order to ensure sustained presence, the Indian Navy will comprehensively address the twin issues of ‘reach’ and ‘sustainability’ of naval forces.”<sup>198</sup> This includes the concepts of longer operational cycles, mixing the force ratio between strike groups, enhancing logistical support and extending reach through naval air power. Enhancing these concepts feeds into the Indian Navy’s ambitions of power projection and sea control. The document suggests the growth of India’s maritime interests across vast geographical footprints precipitates the requirement for pursuing the capability of sustaining power projection and sea control in the “blue water” environment.<sup>199</sup> This is realized through enhanced support of the aforementioned battle groups, SAGs, increased air power, sea lift and amphibious capability, and long-range precision strike weaponry.

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<sup>195</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

<sup>196</sup> Khurana, “India’s Maritime Strategy,” 17.

<sup>197</sup> “Indigenous Aircraft Carrier,” World Navies—India, Jane’s IHS Markit, 21 July 2017, <https://janes.ihs.com/Janes/Display/1322696#Indigenous aircraft carrier>.

<sup>198</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

<sup>199</sup> Ibid.

Understanding India's strive toward modernization and indigenization can assist analysts and policymakers in better understanding how India shapes their maritime strategy. The past decade has seen India developing their own twenty-first century platforms to wrest control of the seas within the IOR and project power beyond its boundaries. This is important when other nations in the world are looking to expand through power-projection platforms, like the new Queen Elizabeth-class of the Royal Navy. With a rising China and a resurgent Russia adding to the complex formula in the maritime realm, it would be prudent to continue looking at India as a rising and modernizing naval power. *Ensuring Secure Seas* tells us up front that "India has an overwhelming reliance on the seas for its external trade and for sustaining its energy needs."<sup>200</sup> Chapter IV will look deeper into India's economic and trading prowess within the IOR, along with domestic political factors that influence India's naval modernization and maritime strategy.

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<sup>200</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

#### **IV. INDIA'S TRADE, ECONOMY, AND DOMESTIC POLITICS**

In May 2014, the BJP won a landslide victory in the Indian general elections that won them a majority of seats in *Lok Sabha* (Indian Parliament) and placed Narendra Modi as Prime Minister of India. The public saw BJP's control of the Indian government as an exciting prospect for development and growth in India as their campaign was heavily based on economic growth. According to Rajiv Kumar, "it was Modi's decision to focus his campaign on economic and development issues that led to the party's remarkable victory."<sup>201</sup> Focus on economic growth as a model for development included expansion of foreign trade, requiring transportation via the SLOCs and necessary protection to ensure these trade lanes are not interrupted. The Modi administration's priorities brought a new focus on the Indian navy as the best tool at the government's disposal to ensure security of the SLOCs, especially in the Indian Ocean. Zakir Hussain asserts that India has taken steps the late 1980s to modernize and expand its navy, to include equipping it with modern weapons and equipment, in order to "safeguard, secure, and enhance its maritime interests."<sup>202</sup> How does the focus on foreign trade and domestic politics impact the expansion of the navy? Specifically, when a country is more dependent on trade, does that foster the need for a growing and robust naval force to secure its interests? The focus of this chapter is to explore the Indian economy and its dependence on trade as well as the link between economic growth, its domestic politics, and the expansion and modernization of the Indian navy. This chapter will use the theoretical framework of the relationship between trade, economic prosperity, and naval supremacy provided by Alfred Thayer Mahan and summarized in Chapter I. How does the Modi administration influence the economy and foreign trade policy of India, and what is its impact on Indian defense spending with specific regard to the navy? To begin, we must understand where India is today in terms of their economy and trade.

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<sup>201</sup> Rajiv Kumar, "India's Watershed Vote: What It Means for the Economy," *Journal of Democracy* 25, no. 4 (October 2014): 47. ProQuest document ID: 161463756.

<sup>202</sup> Zakir Hussain, "India's Maritime Policy on the Gulf States: Planning, Projection, Prescription," *IUP Journal of International Relations* 7, no. 2 (April 2013): 56. ProQuest document ID: 1434092361.

## A. INDIA'S ECONOMY AND FOREIGN TRADE

India is currently the seventh largest economy in the world, and one of the fastest growing economies in history following their reforms at the end of the twentieth century. According to Vivek Singh, following liberalization in 1991, India fostered capitalism and socialism to create a mixed economy where the focus was imports and exports as a means of stimulating economic growth.<sup>203</sup> India was opened up to the global markets as a result, making it easier for foreign investors to come to India and domestic businessmen to reach out into the world markets. States in India with favorable initial conditions, especially supporting infrastructure, saw faster growth than the less developed states, making it easier to break out into the global market. According to the World Bank, India's Gross Domestic Product (GDP) growth between 1991 and 1999 rose from 1.057 percent to 8.846 percent, respectively.<sup>204</sup> To grow so rapidly in eight years was certainly an impressive feat for a developing nation like India. How did such a feat come to pass?

The twenty first century saw similar growth rates to boost India into the ranks of the top economic nations. In 2000, India saw GDP growth at 3.841 percent with it peaking at an impressive 10.21 percent in 2010.<sup>205</sup> According to Rakesh Mohan and Muneesh Kapur, 2003–2008 was considered the “Golden Era of Growth” where the momentum of growth in India grew stronger.<sup>206</sup> While foreign trade only account for a part of the Indian economy, it is the exports that continue to increase that is most interesting. Since 2002, exports, especially goods and services, have seen a drastic increase as much as twenty to twenty-five percent.<sup>207</sup> Kapur and Mohan continue to argue that based on the increases in exports, there should be a reasonable growth

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<sup>203</sup> Vivek Singh, “India’s Foreign Trade: An Exploratory Study,” *ASBM Journal of Management* 9, no. 1 (January-June 2016): 29–30. ProQuest document ID: 1768170469.

<sup>204</sup> The World Bank, “India’s GDP Growth (Annual %),” accessed 2 March 2017, <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2015&locations=IN&start=1991&view=chart>.

<sup>205</sup> Ibid.

<sup>206</sup> Rakesh Mohan and Muneesh Kapur, “Getting India Back to the Growth Turnpike: What Will It Take?” *India Review* 14, no. 1(2015): 128–30. doi: 10.1080/14736489.2015.1001283.

<sup>207</sup> Ibid., 138.

expectation of “11 to 12 percent between 2017 and 2032” in global trade overall.<sup>208</sup> Additionally, the authors write “exports of goods and services would increase from the current level of about 25 percent of GDP to about 30 of GDP in 2012–22 and 38 percent in 2027–32.”<sup>209</sup>

With the share of the foreign trade sector rising relative to domestic consumption to include the increases in the future, it is logical to see a natural growth of the infrastructure that supports growing increases of exports and imports. Kapur and Mohan assert that, even given the current projections of foreign trade growth for the Indian economy, it is not possible without considerable investment into transportation and logistical hubs like shipping ports.<sup>210</sup> It is important to note the incredible investments into support infrastructure and elements for ocean-going shipping and trade such as ports and merchant vessels. According to the Indian Ministry of Shipping, the budget allocation for 2016–17 to be used for maintenance and expanding infrastructure surrounding ports that support the shipping industry is roughly \$280 million alone.<sup>211</sup> This figure does not take into account the amount required for maintaining of the merchant vessels required to the shipping industry. The Ministry of Shipping, however, provides data that presents a crawling upward trend in shipping traffic through Indian ports. In 2007–08, twelve major Indian ports oversaw the transport of 519.31 million tons of cargo and continued to rise, peaking in 2014–15 with 581.34 million tons.<sup>212</sup> With a continued increasing trend in tonnage of shipping going in and out of Indian ports, it would be prudent to suggest that as more trade is handled in India, the costs associated with shipping and port maintenance will rise, as undoubtedly will trade revenue contributing to the GDP.

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<sup>208</sup> Mohan and Kapur, “India Back to the Growth Turnpike,” 138.

<sup>209</sup> Ibid.

<sup>210</sup> Ibid.

<sup>211</sup> Government of India, Ministry of Shipping, “Outcome Budget 2016–17,” accessed 6 March 2017, <http://shipping.gov.in/showfile.php?lid=2236>. Figure converted from 1871.49 Rs. in crores to USD based of exchange rate at date of access.

<sup>212</sup> Ibid. Twelve major ports include Kolkata/Haldia, Paradip, Visakhapatnam, Chennai, Kamarajar, Tuticorin, Cochin, New Mangalore, Mormugao, Mumbai, Jawaharlal Nehru Port, and Kandla.

Jitendra Panigrahi and Ajay Pradhan look into the association between the shipping industry, foreign trade, and economic expansion. They argue “the globalization of the economy and the need for sustainable growth are having a strong influence on international sea freight transport and seaports.”<sup>213</sup> The findings of links between India’s shipping industry and their economy provides some of the justification for the Ministry of Shipping’s investments into maintenance costs and improving the infrastructure of major ports to handle trade coming and going out. Additionally, Panigrahi and Pradhan argue “the expansion of global trade volumes and growing multipolarity of trade flows is going to impact world shipping as profoundly as the past trend realized for linear shipping and containerized cargo.”<sup>214</sup> The data provided by the Ministry of Shipping confirms Panigrahi and Pradhan’s predictions on increasing volumes of maritime trade and the subsequent costs of supporting major ports to handle this trade, especially in India.

According to Hussain, India’s seaborne trade to grow from just under 600 million tons (MT) “to 2,134 MT by 2020, i.e., about 3.56 times the current trade, leading to an increase in India’s share in global seaborne trade.”<sup>215</sup> Hussain attributes this rise to countries in the Western region of the Indian Ocean as the intensity is coming from the Persian Gulf (OPEC affiliates) and Africa consisting of oil and non-oil trading enterprises.<sup>216</sup> The increases in tonnage gives additional merit Panigrahi and Pradhan’s arguments. As presumed from before, foreign trade in India is an incredibly large part of economics in South Asia. With this in mind, a nation as densely populated as India, with GDP that is now increasingly dependent on trade, must take into account the necessity for security of their trade routes. To better understand the link between security and external trade, let us take a moment to look at the historical and theoretical link between trade and security from the perspective of Mahan.

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<sup>213</sup> Jitendra Panigrahi and Ajay Pradhan, “Competitive Maritime Policies and Strategic Dimensions for Commercial Seaports in India,” *Ocean & Coastal Management* 62 (2012): 54. doi: <http://dx.doi.org/10.1016/j.ocecoaman.2012.03.008>.

<sup>214</sup> Ibid., 65.

<sup>215</sup> Hussain, “India’s Maritime Policy on the Gulf States,” 43.

<sup>216</sup> Ibid., 43–45.

## B. THE INFLUENCE OF TRADE UPON SEA POWER

In 1890, then Captain A.T. Mahan, while lecturing at the United States Naval War College, published *The Influence of Sea Power upon History: 1660–1783* as a method of analysis of the significance of naval supremacy in the advancement of the British Empire and their subsequent control of the SLOCs covering the entire globe. In it, he uses specific historical examples to catalogue the relationship between the empire's seagoing trade and the navy that could not be rivaled for over a century. Can Mahan's views on foreign trade and navies be applied in India's case? According to Jon Sumida,

Mahan owed his fame to the appeal of his propositions about navies and international relations: The first was that maritime commerce was essential to the economic prosperity of a great power. The second was that the best means of protecting one's own trade while interdicting the enemy's was to deploy a fleet of battleships capable of maintaining naval supremacy, the corollary of which was that a commerce raiding strategy executed by cruiser was incapable of inflicting decisive injury. The third was that a nation with naval supremacy could defeat a country that was militarily pre-eminent.<sup>217</sup>

Applying this framework in the case of India, based on Mahanian thought, maritime commerce (read seagoing foreign trade) is vital for the economic growth of India. Additionally, the second premise is to be assumed during a period of war, however, even in peacetime conditions a navy is essential for securing a nation's trading interests within the SLOCs while naval presence would suggest a conventional deterrent against other nation's trading vessels should India's come under attack. Lastly, maintaining naval supremacy, especially in the Indian Ocean, would guarantee India's advantage even against nations with even greater military capacity than India (Russia, China, and the United States). Sumida continues to suggest "Mahan's ideas about sea power, which among other things dealt with the inter-connectedness of force, economics, and geography, have prompted considerable discussion of the relationship of his work to geopolitics."<sup>218</sup>

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<sup>217</sup> Jon Sumida, "Alfred Thayer Mahan, Geopolitician," *Journal of Strategic Studies* 22, no. 2 (1999): 39. doi: 10.1080/0140239908437753.

<sup>218</sup> Sumida, "Mahan, Geopolitician," 39.

Sumida offers the argument of the interrelationship between India's foreign trade, economic growth, and their navy through the voice of Mahan. Others such as David Scott examine India's economic and naval pre-eminence though a Mahanian lens, argues that "an economically resurgent India has vast and varied maritime interests with aircraft carrier strength 'capable of exercising sea control in...the distant reaches of the IOR.'"<sup>219</sup> Since aircraft carriers are only a part of power projection expansions for the Indian navy, it seems necessary for India to also invest deeply in providing formidable maritime force to secure its interests in the IOR. Additionally, Scott cites former Indian Chief of Naval Staff when discussing India's economic growth and subsequent naval expansion: "as a booming economic power, our growth will be increasingly dependent on trade; we therefore have substantive maritime interests."<sup>220</sup> Additionally, India's current Chief of Naval Staff, Admiral Sunil Lanba, "warned that any disruption of trade in the region will have an adverse impact not only on the regional but also the global economy."<sup>221</sup> As the ranking officer charged with the oversight of India's navy, Lanba understands that in order to achieve economic goals, the Indian Navy needs to become the net security provider in the IOR since "any disruption of peace and stability in this region would adversely affect India's economic growth."<sup>222</sup>

To conclude on Mahanian views on the association between economic growth, trade, and maritime dominance, there seems to be a relationship between India's economic growth from foreign trade and their rising navy. Sumida's argument in his piece is predicated on the fact that "Mahan was a proponent of sea power as an independent variable, that is, naval supremacy was the source of economic preeminence."<sup>223</sup> Based on this, one can conclude that as India continues to grow economically due to overseas trade, the Indian navy will increase and expand in order to

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<sup>219</sup> David Scott, "India's 'Grand Strategy' for the Indian Ocean: Mahanian Visions," *Asia-Pacific Review* 13, no. 2 (2006): 116. doi: 10.1080/13439000601029048.

<sup>220</sup> Ibid., 116.

<sup>221</sup> IANS, "Indian Navy 'Net Security Provider' in Indian Ocean Region: Sunil Lanba," *Financial Express*, 15 February 2017, <http://www.financialexpress.com/india-news/indian-navy-net-security-provider-in-indian-ocean-region-sunil-lanba/551497/>.

<sup>222</sup> Ibid.

<sup>223</sup> Sumida, "Mahan, Geopolitician," 43.

secure the SLOCs. A resultant, more robust navy would enable India to provide more security and stability to the IOR’s SLOCs, thus allowing the global market to ship more trade through the SLOCs undeterred to promote additional sustained economic prosperity for India. Thus, the cycle shall continue.

### C. MODI AND THE BJP: GETTING INDIA BACK ON TRACK FOR ECONOMIC GROWTH

Prior to the 2014 election that placed Narendra Modi as prime minister and the BJP as the majority party in *Lok Sabha*, the BJP’s campaign platform was focused on economic growth and the preceding regime’s stagnating economic performance for India.<sup>224</sup> Modi was the face of the BJP in the campaign and constantly relied on his experience as the Chief Minister of Gujarat for shaping the national government for India. According to Jivanta Schöttli and Markus Pauli, Modi “championed his administrative experience as Chief Minister in the State of Gujarat along with his ‘Gujarat model’ of economic development.”<sup>225</sup> Modi seems to be affluent with prospects of maritime commerce in his campaign platform since Gujarat’s “annual GDP growth averaged almost 10 [percent] faster than the country as a whole with nearly [eight percent],” thanks in part to roughly 25 percent of India’s maritime commerce passing through its harbors.<sup>226</sup>

With the 2014 Election Manifesto not targeting the Congress government’s policies, the Modi and the BJP attribute their electoral success to their economic ambitions for India. Jon Dorschner discusses the disastrous outcome for the incumbents, the INC and the United Progressive Alliance (UPA) associates: “In the 10 years that the UPA government has been in power, Indian economic growth has declined, while inflation and corruption have increased.”<sup>227</sup> This suggests that the INC party in power

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<sup>224</sup> Jivanta Schöttli and Markus Pauli, “Modi-nomics and the Politics of Institutional Change in the Indian Economy,” *Journal of Asian Public Policy* 9, no. 2 (2016): 154. doi: 10.1080/17516234.2016.116532.

<sup>225</sup> Ibid.

<sup>226</sup> Ibid., 158.

<sup>227</sup> Jon Dorschner, “The Indian Election: Historic But Not the Magic Bullet,” *American Diplomacy* (June 2014): 2. ProQuest document ID: 1540082101.

prior to the 2014 General Election is to blame for India's slowing economic growth, while the BJP elected to power under Modi would be the answer to get India back on the path to economic growth. Are Narendra Modi and the BJP the answer to economic growth issues? The answer lies in their actions rather than the rhetoric from the campaign season.

Scholars like Dorschner are optimistic about Modi's ascension to the Prime Minister position in India. Dorschner believes that Modi "will likely adopt an 'internationalist' trade policy that stresses economic growth, trade liberalization, encouragement of Indian international trade, and easing foreign investment in India."<sup>228</sup> What were Modi and the BJP's official policies with regard to foreign trade According to the Foreign Trade Policy (FTP) statement for India released in 2015, foreign trade is a vehicle that will further globalization of Indian markets with a goal of increasing India's exports to nearly \$900 billion by the year 2019.<sup>229</sup> There is a focus on this because India currently faces the worst imbalance in foreign trade in its history. While India's share of trade has increased in the global markets, the increase in imports has resulted in a negative trade balance.<sup>230</sup> A continued negative balance could be bad for India because of the potential dependence it may create in certain markets. Additionally, history has seen the issues with trade balances and global markets, the most extreme of which led the Qing Dynasty of China into the Opium Wars with Western powers.

One of Modi's policies to help cure the trade imbalance India suffers from is the "Make in India" campaign. The FTP statement suggests a focus on building the India brand: "A long term branding strategy is required for India to hold its own in this highly competitive environment not merely to attract consumers but, more importantly, to encourage industry to position its products in highly discerning markets and to ensure that Brand India becomes synonymous with high quality."<sup>231</sup> Providing high quality

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<sup>228</sup> Ibid., 3.

<sup>229</sup> Directorate General of Foreign Trade, "Foreign Trade Policy Statement," Ministry of Commerce and Industry, Government of India, 2015, 8, 14. <http://dgft.gov.in/exim/2000/FTPstatement2015.pdf>.

<sup>230</sup> Agrawal, "Globalization and Its Effect on India," 804.

<sup>231</sup> Directorate General of Foreign Trade, "Foreign Trade Policy Statement," 52.

goods and services for export from India should increase global markets to invest in importing from India to balance out the foreign trade. As a result, India should see more favorable growth rates in their GDP as a result from foreign trade. The legal fortification for Make in India can be found in the FTP document for 2015–2020. Within the FTP, Modi and the BJP have made it easier for the merchandise and service exports from India schemes by providing “rewards to exporters to offset infrastructural inefficiencies and associated costs involved and to provide exporters a level playing field.”<sup>232</sup> By placing incentives in place to help Indian businessmen export goods and provide services from India, it encourages more exports into foreign markets, further balancing the trade. Policies such as this help solidify Modi’s and the BJP’s campaign promises of fixing the economy and getting back to higher rates of economic growth.

Analysts like Samuel Bergenwall understand that the victory the BJP claimed back in 2014 has brought economic success for India, where “a favorable international environment combined with macro-economic stability, rising [foreign investment] and some economic reforms have put growth back on track.”<sup>233</sup> Foreign investment is also a considerable economic strategy Modi and the BJP have pursued in order to help bolster their “Make in India” campaign and boost exporting potential since the Indian economy is heavily dependent on it.<sup>234</sup> This warrants a look at India’s trading partners to see the success of Modi and the BJP’s ambitions.

In May 2015, Prime Minister Modi travelled to China where he oversaw the signing of Memorandums of Understandings (MOU) that yielded \$22 billion worth of trade deals between the PRC and India.<sup>235</sup> According to a statement released by the Ministry of External Affairs in 2015, these deals “will enhance Chinese companies’

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<sup>232</sup> Directorate General of Foreign Trade, “Foreign Trade Policy [1<sup>st</sup> April 2015 – 31<sup>st</sup> March 2020],” Ministry of Commerce and Industry, Government of India, 1 April 2015, 58.

<sup>233</sup> Samuel Bergenwall, “Assessing India’s Rise and the Road Ahead,” *Strategic Analysis* 40, no. 5 (2016): 387. doi: 10.1080/09700161.2016.1209905.

<sup>234</sup> Ibid., 390.

<sup>235</sup> “PM Modi in China: 26 Deals Worth \$22 Billion Inked Foreign Trade,” *Economic Times (Online)*, 17 May 2015. ProQuest document ID: 1681116888.

commitment to ‘Make in India.’”<sup>236</sup> The PRC’s willingness to foster a good relationship and pursue “Make in India” investments paint a very optimistic picture for future Sino-Indian relations. While there is skeptical opposition to cooperation with China, Radha Raghuramapatruni believes that most countries in the region should not concern themselves with competition between China and India.<sup>237</sup> This would be another point where Modi’s position as prime minister is advantageous for the Indian economy with regard to trade with China. The prime minister has previous economic relationships with entities because, according to K. Alan Kronstadt, “as Chief Minister, Modi made four business-oriented trips to China and eagerly developed commercial links between Gujarat and China.”<sup>238</sup> Modi’s campaign rhetoric has also continued to suggest wanting to continue this relationship for the entirety of the nation; Dorschner argues that Modi wants China to be a great trading and investment partner with India.<sup>239</sup>

Economic cooperation, rather than competition, with China seems more likely according to Raghuramapatruni’s analysis and Prime Minister Modi’s foreign trade aspirations. Raghuramapatruni’s findings show that “one significant feature of the analysis is that China has always been the most important source of imports for India” while “China has always been the major source of export destination to Indian exports.”<sup>240</sup> With China looking favorably at Modi’s “Make in India” program, India participating and working toward China’s Maritime Silk Road (MSR) initiative will bring more cooperative opportunities for economic growth. Zhu Li argues that the MSR could bring development and investment opportunities for India, as “attracting foreign investment, particularly in developing India’s manufacturing industry, is a key policy

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<sup>236</sup> Ibid.

<sup>237</sup> Rada Raghuramapatruni, “China and India: Economic Performance, Competition and Cooperation,” *Foreign Trade Review* 46, no. 4 (January 2014): 50. doi: 10.1177/0015732515120403.

<sup>238</sup> K. Alan Kronstadt, “India’s New Government and Implications for U.S. Interests,” *Current Politics and Economics of Northern and Western Asia* 23, no. 4 (2014): 635. ProQuest document ID: 1667654516.

<sup>239</sup> Dorschner, “Indian Election: Historic,” 4.

<sup>240</sup> Raghuramapatruni, “China and India: Economic Performance,” 55, 57.

objective of the Modi government.”<sup>241</sup> Li’s premise is that the MSR would allow for Chinese investment to bleed into sectors other than infrastructure to allow for continuing improved Sino-Indian trade.<sup>242</sup> This suggests further cooperation between the PRC and India economically and will fuel necessity for maritime security cooperation between the PRC navy and the Indian navy.

The unfortunate aspect of the Sino-Indian trade relationships is that while both countries are important for each other’s imports and exports, there remains a gaping trade imbalance between the two. The Ministry of Commerce has expressed concerns with Beijing on this imbalance, which exceeded \$52 billion in 2015, accounting for more nearly half of India’s negative trade balance.<sup>243</sup> Even with Modi’s intentions of good relations with China, Raghuramapatrungi’s argument that “bilateral trade between the two countries will be among the most important economic relationships in the world” comes into question when one will not accommodate the other to satisfy the balance of trade.<sup>244</sup> There seems to be great potential for economic cooperation with China, which may lead to security cooperation in the IOR; however, the Sino-Indian trade relationship must strive toward balanced harmony in order to achieve this.

Another aspect where Modi and the BJP fell short of their promise to improve the economy was through demonetization. In November 2016, with aspirations of combatting corruption and counterfeiting, the Indian government eliminated the 500- and 1000-rupee bank notes from public circulation. While their intentions may be good to weed out illegal activities, demonetization may have cost the Modi government some of their goals of economic growth. According to an article in the Economist, consumer goods manufacturing and export dropped by one point five percent, India’s largest motorcycle company, MotoCorp, dropped sales by a third, investments in some areas dropped by a

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<sup>241</sup> Zhu Li, “The Maritime Silk Road and India: The Challenge of Overcoming Cognitive Divergence,” *Asia Policy* 22 (July 2016): 22. doi: <https://doi.org/10.1353/asp.2016.0040>.

<sup>242</sup> Ibid., 24.

<sup>243</sup> “Delhi to Beijing: Give Indian Goods Greater Market Access,” *Businessline*, 13 October 2016. ProQuest document ID: 1828411669.

<sup>244</sup> Raghuramapatrungi, “China and India: Economic Performance,” 68.

quarter resulting in the lowest corporate growth in three decades.<sup>245</sup> The demonetization policies put in place cost India nearly half a percent of GDP growth and, should the trend continue, paints a less optimistic picture for the future when one thinks about defense spending as a method of securing the SLOCs for further trade and growth potential.

#### **D. MAINTAINING AND OPERATING THE INDIAN NAVY**

India's foreign trade exports consist of a wide range products and commodities such as include tea, rice, coffee, cotton, wheat, tobacco, sugar, spices, ores, minerals, manufactured goods, chemicals, textiles, engineering items, jewelry, and others.<sup>246</sup> The complexity of India's foreign trade furthers the necessity to improve security and continue the cycle based on Mahanian framework. Scholars like Hussain insist that India's economy in the future will depend on maritime commerce as nearly 77 percent of its value and 95 percent of its volume travels via the SLOCs.<sup>247</sup> As one of the dominant naval powers in the region, "India has two major responsibilities in [the] IOR: one, to protect and safeguard the SLOCs...for legal maritime activity; and second, to prevent inimical use of the seas."<sup>248</sup> Providing a navy that can wrest control and provide security within the SLOCs will ensure trade flows uninterrupted, building potential for GDP growth and provide additional revenue to invest back into the military for continued and increased security. According to Harsh Pant, "sustained rates of high economic growth over the last decade have given India greater resources to devote to its defense requirements."<sup>249</sup>

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<sup>245</sup> "The High Economic Costs of India's Demonetization," *Economist*, 7 January 2017, <http://www.economist.com/news/finance-and-economics/21713842-benefits-withdrawing-86-rupees-circulation-remain-elusive>.

<sup>246</sup> G. Raghavender Raju and Vishwanath Pandit, "An Analysis of India's Trade Flows: During the Post-Reform Period," *Journal of International Economics* 7, no. 1 (January-June 2016): 67. ProQuest document ID: 1828144726.

<sup>247</sup> Hussain, "India's Maritime Policy on the Gulf States," 43.

<sup>248</sup> Ibid., 52.

<sup>249</sup> Harsh Pant, "India in the Indian Ocean: Growing Mismatch between Ambitions and Capabilities," *Pacific Affairs* 82, no. 2 (Summer 2009): 283. ProQuest document ID: 217682789.

According to *Janes*, the total defense budget for the Indian navy in 2016 was over \$52 billion, making up 2.31 percent of the GDP.<sup>250</sup> While it is predicted that the defense budget for the Indian navy should remain around two percent of GDP as in the other forces, there is an expectation that as the GDP will increase over the years, so will the annual spending for the navy. With spending increasing for the navy every year, potential for increased modernization and expansion will increase as well. According to Pant, “capital expenditure determines the trend of modernization and with 52 percent of its allocation going toward capital expenditure, the Indian navy is ahead of the other two services in its endeavor to modernize its operations.”<sup>251</sup> Bergenwall also shares this sentiment, attributing the growing GDP and subsequent budgets to increases in India’s military power within the international setting.<sup>252</sup> Based on military spending as a share of its GDP from 2015, Bergenwall believes India will be among the top five largest defense spenders by 2020, surpassing the United Kingdom, France, Japan, and Germany.<sup>253</sup> This is all based on a consistent rate of defense spending and continual growth of the GDP.

This is not the first time India has seen naval expansion and attempted modernization at the result of GDP growth and economic health. According to Scott, when the Hindu nationalist BJP was elected in 1998, the defense budget expanded when it was given a “14 percent increase in overall defense spending, within which the navy received a still bigger increase of 17 percent.”<sup>254</sup> Additionally, former Chief of Naval Staff Sushil Jumar “acknowledged at the end of 2000 that ‘it is only this [BJP] government that has correctly appreciated the role and requirement of maritime power in the age of globalization... India’s national interest had been made coterminous with maritime security.’”<sup>255</sup> Bergenwall also acknowledges the important role of the BJP since

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<sup>250</sup> Total Defense Budget by Activity for India. Including Spending on Navy, *Jane's*, accessed 1 March 2017. <https://janes.ihs.com.libproxy.nps.edu/CustomPages/Janes/Jdb/SearchResults.aspx>.

<sup>251</sup> Pant, “India in the Indian Ocean,” 284.

<sup>252</sup> Bergenwall, “Assessing India’s Rise,” 390.

<sup>253</sup> Ibid., 393.

<sup>254</sup> Scott, “India’s ‘Grand Strategy’ for the Indian Ocean,” 107.

<sup>255</sup> Ibid., 109.

1998, where their influence was well on its way to establishing a nuclear triad for India to include maritime delivery in the form of ballistic missile submarines like the INS Arihant.<sup>256</sup> Additionally, India aspires for additional blue-water and power projection capabilities in the form of expanding carrier battle groups with modern warships; the BJP authorized nearly eight billion dollars for warship construction, emphasizing their importance for boosting maritime defense.<sup>257</sup> The same is true today as it was in previous decades with BJP majority in the government. The 2014 Election Manifesto provides a state priority to “modernize armed forces, and increase the R&D in defense, with a goal of developing indigenous defense technologies and fast tracking of defense purchases.”<sup>258</sup>

Building and employing indigenous defense products, especially naval material, is a way Modi and the BJP are providing a more robust military power to provide security for their economic interests and to stimulate GDP growth. Modi’s “Make in India” campaign allows for foreign investment into various defense and weapons projects while they are still manufactured and produced in Indian factories, providing jobs and support for growth. The Indian navy, in particular, benefits from a United States-India deal where they would acquire the new BrahMos supersonic anti-ship cruise missiles for their warships, but produce them within India.<sup>259</sup> Additionally, GE Marine holds a contract to allow production in India of LM2500 gas turbine engines for India’s P17A stealth frigate as well as their indigenous aircraft carrier, INS Vikrant.<sup>260</sup> The Vikrant is one of two carriers designed, planned, and constructed in India through private shipyards through Cochin Shipyard Ltd as a joint government venture to save more Indian jobs and utilize

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<sup>256</sup> Bergenwall, “Assessing India’s Rise,” 393.

<sup>257</sup> Ibid., 394.

<sup>258</sup> Bharatiya Janata Party, “Election Manifesto 2014,” accessed 8 June 2016, [http://www.bjp.org/images/pdf\\_2014/full\\_manifesto\\_english\\_07.04.2014.pdf](http://www.bjp.org/images/pdf_2014/full_manifesto_english_07.04.2014.pdf).

<sup>259</sup> “DAC Nod for Major Defence Deals under ‘Make in India.’” *New Indian Express*. 14 May 2015. <http://www.newindianexpress.com/nation/DAC-Nod-for-Major-Defence-Deals-Under-Make-inIndia/2015/05/14/article2813455.ece>

<sup>260</sup> “GE Marine to Provide LM2500 Gas Turbines for Indian Navy’s P17A Frigate.” *Progressive Media - Company News*. 13 December 2016, LexisNexis Academic.

the shipping industry and supporting infrastructure.<sup>261</sup> The undersea warfare capabilities of the Indian navy will also benefit from this initiative. The defense budget from 2014 put primary focus into the navy to manufacture six new submarines in order to better operate and secure the trade areas in the western Indian Ocean.<sup>262</sup> “Make in India” has similar deals for the Indian army and air forces, however, the navy requires a larger capital to maintain and innovate meaning larger investments and potentials for growth.

With a renewed commitment to building better warships and expanding their capacity to secure the seas, the Indian government puts themselves in a better position to deter potential threats to their maritime commerce security. While China is believed to be a very beneficial economic cooperative partner for India, they are increasing their economic, and potentially military, footprint in the IOR through ports in Hambantota, Gwadar, and eventually in the Maldives. As a result, Indian maritime doctrine and strategy has focuses on combatting the PLAN in that area. According to Donald Berlin, India’s armed forces, the navy in particular “should be able to, should the need arise: keep China’s navy out of the Indian Ocean; enter the South China Sea and project military power directly against the Chinese homeland; project military power elsewhere in the Indian Ocean – at key choke points, on vital islands, around the littoral, and along key sea routes.”<sup>263</sup> Berlin takes a very Mahanian stance in his views on Indian defense posturing toward China. The PLAN is not the only potential threat to Indian maritime commerce the navy needs to concern themselves with, however.

The Gulf Region toward the western Indian Ocean is a major hub for Indian trade, especially with regard to energy and food security. According to Hussain, “a factor that can seriously compromise India’s economic growth...is the interruption in the supply of hydro carbons from the Persian Gulf countries.”<sup>264</sup> Additionally, Hussain suggests that

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<sup>261</sup> “Private Shipyards to Build Vessels for Indian Navy.” *Times of India*). 24 October 2016, LexisNexis Academic.

<sup>262</sup> “India Military Capability Undergoing an Upgrade.” *Gulf News (United Arab Emirates)*. 27 October 2014, LexisNexis Academic

<sup>263</sup> Donald Berlin, “India in the Indian Ocean,” *Naval War College Review* 59, no. 2 (Spring 2006): 77. <http://handle.dtic.mil/100.2/ADA519745>.

<sup>264</sup> Hussain, “India’s Maritime Policy on the Gulf States,” 45.

the “re-emergence of piracy in the Gulf of Aden and adjoining regions, the possibility of terror-piracy..., instability at sea as well as protection of SLOCs...are some of the major challenges India and other nations might confront in the region.”<sup>265</sup> While piracy is apparent and provides additional challenges for Indian maritime strategists, it may also present an opportunity for bi- and multi-lateral security partnerships in the IOR. The U.S. and PLA navies, both countries who have considerable stake in maritime commerce within the Indian Ocean, have counter-piracy task force vessels operating in the Gulf of Aden. India’s cooperation in assisting the other superpowers to help provide defense of the SLOCs will lead to enhanced stability in the IOR as well as lay additional foundations for economic cooperation.

India is a rising economic and military power with huge potential for growth and increasing defense capacity to put them among the top nations in the world in terms of military power and money within the next decade. India’s GDP has undergone incredible strides of growth since liberal economic reforms in the 1990s and their military has expanded and modernized considerably since their independence following World War II. India has had roughly the same amount of time to pursue a robust naval force as the PRC has since Mao Zedong announced the formation in 1949, and yet, India is the dominant naval power in the Indian Ocean.

India’s foreign trade is dependent on a constant expansion of exports and imports that has seen upwards trends since the nation was opened up to global markets during liberalization. Increasing trade with foreign states has caused the GDP to maintain healthy growth over the years, albeit slightly fluctuating. As a result, the Indian government has accumulated the revenue necessary to devote to the shipping industry only to increase maritime trading capacity further and stimulate further growth. The growing economy and increasing trade means increased traffic via the SLOCs, which required an increasing focus on maritime security, seen through a Mahanian lens. The rise to power of Narendra Modi and the BJP accumulating a majority hold over the *Lok Sabha* provided the Indian people with optimism of getting the Indian economy back to a

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<sup>265</sup> Hussain, “India’s Maritime Policy on the Gulf States,” 48–50. Hussain defines terror-piracy as an alliance between pirates and terrorist groups at sea.

growing fast track. Several policies put into place to help the Indian businessmen and promote foreign investment trade attempted to surge the GDP growth. Policies such as demonetization and frustrations over market access with foreign trading partners, such as China, slowed GDP growth slightly, granting ammunition to Modi and BJP skeptics. Regardless, additional policies like “Make in India” and increased devotion to defense spending, particularly for the navy, prompted additional prospects for growth and naval expansion.

There appears to be a considerable link between GDP growth as a result of increased trade and increased naval spending and modernization. This supports Mahanian views of economic success predicated on maritime commerce with a robust navy to defend those interests. This paper did not look into opposing political parties and their platforms surrounding trade and defense spending, which may warrant further research, as I believe the BJP in power contributes significantly to expansion of India’s navy. With that mind, it is hard to suggest that India’s rising navy and maritime capabilities are not a result of increased GDP growth and favorable trade.

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## V. CONCLUSION

### A. RESEARCH FINDINGS

The purpose of this thesis was to explore what is shaping Indian maritime strategy in the twenty-first century from the basis of the *Ensuring Secure Seas* document. Over the course of the study, factors such as competing players within the IOR, the modernization and expansion of the Indian Navy, India's economy and overseas trade, and their domestic politics were examined as causal factors. The initial hypothesis was a combination of these factors leading to the shape India's maritime strategy took, with a large emphasis on China as a key factor among them all. This, however, was not the case, as the China factor did not play as big of a part in *Ensuring Secure Seas*. As alluded to in Chapter III, and in further detail in Chapter IV, the Indian economy and overseas trade interests have played one of the biggest factors in ensuring security of the sea to sustain freedom of navigation for trade. *Ensuring Secure Seas* demonstrates to us an increased focus on security of the oceangoing energy and trade routes as a basis for India's maritime strategy.<sup>266</sup> The research for this thesis has demonstrated that all other factors explored contribute directly to this main point.

The vastness of the IOR's maritime geography along with all the immediate maritime players does not necessarily precipitate a naval arms race in the twenty-first century. The focus on securing India's trade routes and interests vis-à-vis the navy should be sufficient proof that the navy's expansion and modernization is not a means of external balancing against these players. China, the United States, and Pakistan still can present a credible maritime threat against India, however, *Ensuring Secure Seas* is developed more for cooperation with than deterrence against these nations. Chapter II also described non-state actors in the form of piracy and maritime terrorism as concerns for India. The threats these non-state actors can pose is on the Indian economy and maritime industry, especially in the littoral and in the vicinity of vital trade routes. This can be inferred from the height of commercial piracy in 2008 where hijackings nearly

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<sup>266</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

doubled from subsequent years in the IOR.<sup>267</sup> Cooperation in the maritime arena may prove to be the best answer for countering piracy and maritime terrorism. *Ensuring Secure Seas* discusses India's devotion to seeking cooperation in the maritime realm with friendly navies in an effort to provide security and stability for the IOR.<sup>268</sup>

In order to provide these degrees of stability for the IOR, and ultimately securing India's trading and energy routes, the Indian Navy is expanding and modernizing their fleet. Chapter III discussed the various modernization and indigenization efforts that are ongoing for several of the fleet's platforms. What this research has gathered from *Ensuring Secure Seas* and reports in Jane's, the Indian Navy's modernization has placed great effort in achieving power projection and sea control capabilities. *Ensuring Secure Seas* has shown that India's maritime areas of interests extend beyond the IOR into the Western Pacific Ocean and into the Mediterranean.<sup>269</sup> Additionally, the maritime strategy demonstrates India's insistence on a fleet structure that mirrors the United States in the form of CBGs to project maritime power abroad.<sup>270</sup> This evidence is further demonstrated from Khurana's analysis shown in Chapter III. Again, this push for naval modernization and expansion within the IOR and beyond directly relates to India's drive for economic security with relation to maritime trade and unimpeded passage via the SLOCs.

India's economic and trade endeavors, as laid out in Chapter IV, plays a huge part in developing *Ensuring Secure Seas*. India's foreign trade within the maritime realm has a link to India's naval development. Chapter IV showed that the economic policies in place favor overseas trade to help boost and sustain the country's continued GDP success, to include support from the current administration. Prime Minister Modi's "Make in India" campaign does not specifically target the Indian defense industry, but continues to provide a national focus for naval indigenization. *Ensuring Secure Seas* discusses "Make in India," explaining that the Navy will support this national focus in order to meet "naval

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<sup>267</sup> Russell, "The Indian Ocean," 197.

<sup>268</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

<sup>269</sup> Ibid.

<sup>270</sup> Ibid.

requirements by designing and producing state-of-the-art platforms, equipment and systems, within globally competitive timelines and costs.”<sup>271</sup> The natural benefit from the Navy supporting “Make in India” is the modernization of platforms seen today as discussed in Chapter III. One can connect that further modernization of the force can enable the Indian Navy to better sustain maritime security within and beyond the IOR in order to facilitate continued and growing commerce on the seas.

The question posed by this thesis, “What factors drive Indian maritime strategy?” is not as simple as one particular answer. As alluded to in this thesis, it is a combination of many factors that ultimately shape India’s maritime strategy and follow-on doctrine within the navy. The primary focus that ties all of these factors together, however, is economic security. Maritime threats, whether they be from state or non-state actors, can have a significant impact on India’s maritime trade. The PRC’s perceived encroachment into the IOR does present a security challenge for India in the maritime realm; however, it seems cooperation is the better course of action rather than deterrence and preparation for war. Maritime cooperation in the IOR appears to be surest way to sustain security and stability among the SLOCs to ensure economic prosperity not only for India but for all nations with trade interests in the region.

## **B. AREAS FOR FURTHER STUDY**

The study into Indian maritime strategy has attempted to be thorough as possible; however, there will always be other areas that can be extrapolated on. Chapter II looked at specific actors that are considered to be nuclear powers with large stakes in the region. Another way to go about this study is to look at Indian maritime strategy in relation to India’s direct neighbors in South Asia. Sri Lanka has a considerable naval force given their geographic position within the IOR. Bangladesh and Burma also have considerable coastlines and extending EEZs into the Indian Ocean that contribute to the region’s maritime and domestic economies. An interesting topic of study would be to expand on India’s maritime relations, militarily and economically, with the littoral states of South Asia, given their geopolitical stances in the region.

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<sup>271</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

Additionally, a more focused topic surrounding sea-based nuclear deterrence in the region. Regionally, India and Pakistan possess the capability to operate a sea-based deterrent through their submarines with SLBMs and SLCMs. Extra-regionally the major global powers such as the United States, the PRC, and Russia, for example, can operate their submarine sea-based deterrent options within the IOR. An interesting area of study would be to examine the repercussions for India and Pakistan entering the realm of sea-based deterrence alongside these extra-regional powers. Additionally, another interesting area of study would be a comparison of Indian and Pakistani doctrine into sea-based deterrence given the radically different command and control structure between civilian and military oversight. Further exploration into how sea-based nuclear deterrence could affect national nuclear strategy between India and Pakistan could be included into this particular study.

### C. CONCLUSION

Admiral Dhowan tells us in *Ensuring Secure Seas* that the 21st century “will be the ‘Century of the Seas’ for India and that the seas will remain a key enable in her global resurgence.”<sup>272</sup> This thesis has attempted to embody Admiral Dhowan’s words by exploring the driving factors of India’s maritime strategy. India’s maritime strategy comes from the need to secure her maritime borders and ensure stability along the SLOCs to foster secure maritime trade. India’s economic policies and national focus has enabled the navy to modernize and indigenize the fleet and subsequent doctrine to deter threats and foster stability within the IOR. In pursuing a CSG fleet structure to project power and sea control abilities within and beyond the IOR, the Indian Navy has enabled potential cooperative ventures with friendly navies to further ensure security and stability in the region. India’s economic growth potential and modernization prowess for their fleet and military should attract the guise of strategists and policy-makers going into the future. If the twenty-first century truly is India’s “Century of the seas,” we should anticipate and look forward to further evolution of Indian maritime strategy.

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<sup>272</sup> Directorate of Strategy, Concepts and Transformation, *Ensuring Secure Seas*.

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